

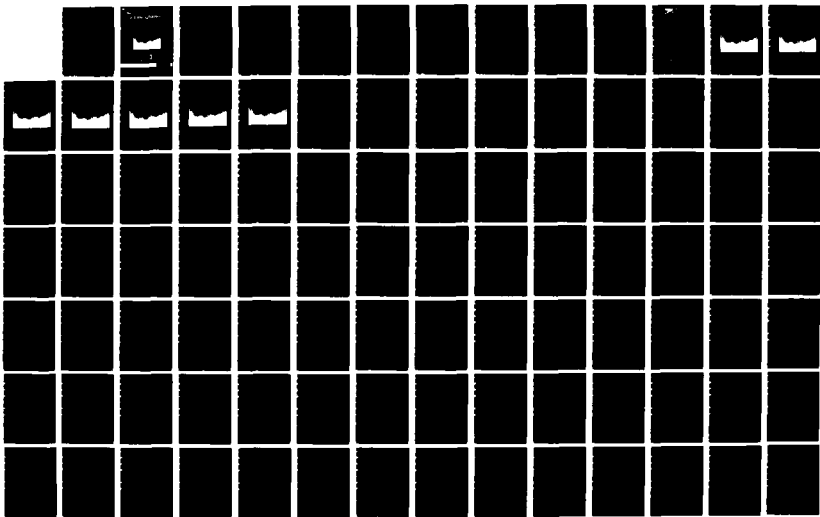
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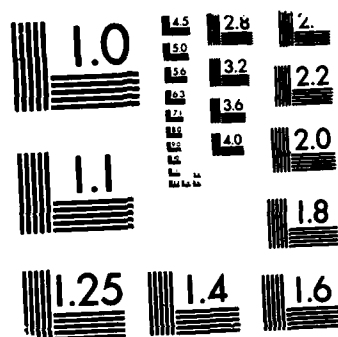
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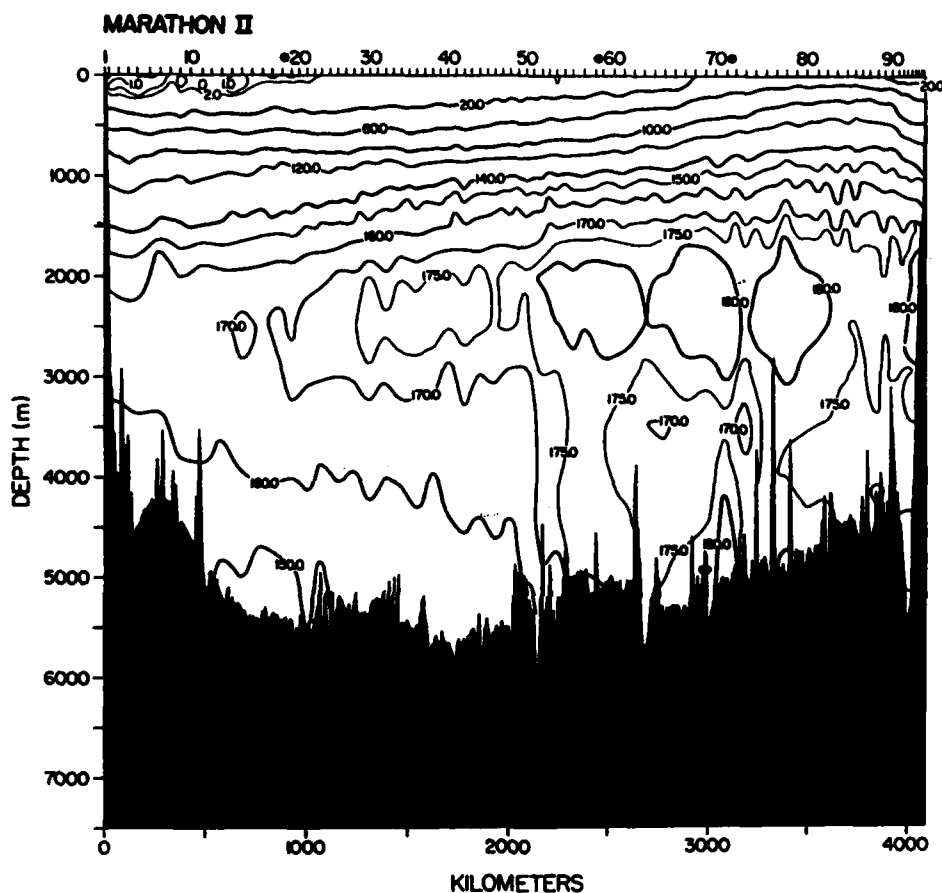
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PHYSICAL, CHEMICAL AND CTD  
DATA  
from the  
MARATHON EXPEDITION  
R/V THOMAS WASHINGTON 261  
4 May-4 June 1984

by

Margie Martin  
Lynne D. Talley  
Roland A. de Szoeke

Data Report 131  
Reference 87-15  
May 1987

National Science Foundation OCE-8318830  
Office of Naval Research N00014-84-C0218

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Hydrographic and CTD measurements were taken from ninety-eight stations between Honolulu, Hawaii and Kodiak, Alaska from 4 May to 4 June 1984 on the second leg of the Marathon Expedition. This report consists of the cruise track, vertical sections, listings of all discrete hydrographic data, a subsample of the CTD data, plots of temperature and salinity as a function of pressure, and plots of potential temperature as a function of salinity. Key words: Physical Oceanography; Density; Oceanographic data; CTD Measurements; Northeastern Pacific Ocean.		

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CORVALLIS, OREGON 97331

PHYSICAL, CHEMICAL AND CTD DATA

from the

MARATHON II EXPEDITION

R/V Thomas Washington 261

4 May - 4 June 1984

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## INTRODUCTION

The hydrographic and CTD data presented in this report were collected aboard the RV *Thomas Washington* on the second leg of the Marathon Expedition, from Honolulu, Hawaii to Kodiak, Alaska (4 May - 4 June, 1984). The NODC identification number for the cruise is TW 261. The objective of the expedition was to provide information about the general circulation from the sea surface to the bottom in the northeastern Pacific with sufficient resolution along the cruise track to resolve the spacing of fronts and the scale of eddy variability. Except in boundary regimes at the beginning and end of the cruise where all stations extend from top to bottom, stations alternated between full water column coverage and coverage to 1500 meters. Station spacing between 28°N and 42°N was decreased in order to better sample the active frontal region. During the cruise, current meter moorings at 28°N and 42°N were retrieved and reset for P. Niiler by a separate group aboard the ship.

The hydrographic and CTD data presented in this report were collected and processed by the Physical and Chemical Oceanographic Data Facility (now part of the Shipboard Technical Support Group) at Scripps Institution of Oceanography. The hydrographic and 2-db CTD data have been sent to the National Oceanographic Data Center. Note that there is no station 72 on the cruise.

## STANDARD PROCEDURES

### *Hydrographic (Rosette) Data*

Each station consisted of a CTD lowering with a rosette carrying 24 Niskin bottles. Most stations included four reversing thermometer racks with one at the surface, one at the bottom, and the others at widely spaced intervals. Water samples were collected on the upcast and analyzed for salinity, oxygen, silicate, phosphate, nitrate, and nitrite. Samples for tritium analysis were collected for Dr. R. Fine and were processed by the Tritium Laboratory at the University of Miami.

Pressure and temperature for the discrete hydrographic tabulations were taken from the calibrated CTD data. The CTD pressure and temperature calibrations are discussed in the following section. Occasional discrepancies between the bottom depth listed in the header record and the maximum depth of the station resulted from incompatibility of the depth as read from the PDR and the actual depth of the cast.

Depths were calculated from CTD pressures (Saunders, 1981).

Salinity samples were analyzed at sea using one of two Guildline Autosol inductive salinometers. All salinity values are calculated from conductivity using the 1978 practical salinity scale (UNESCO, 1981) and are tabulated to three decimal places. Standard seawater batch P92 was used to standardize the salinometer at the beginning and end of each station; salinities are reported relative to P92 and have not been adjusted further. Mantyla (1987) compared various batches of standard seawater with batch P96; he found that the salinity of P92 is about 0.003‰ less than that of P96. A section made in 1985 which intersected the Marathon II section and on which P96 was used as a standard showed salinities in the deep water which were indeed about 0.003‰ higher than Marathon II, indicating that the laboratory comparisons hold *in situ* and that the precision of the autosol measurements is high. Bottle salinities were compared with CTD salinities to identify leaking bottles or salinometer malfunctions. Calibrated CTD salinities were used to replace bottle salinities in the event of problems and are indicated by the letter "D" in the hydrographic data tables. All salinities on station 34 were replaced by CTD salinities because of extensive drift in the autosalimeter standardization from the beginning to the end of that station's analysis; because the CTD salinities were calibrated using a large group of adjacent stations, the CTD salinities for station 34 are nearly as precise as those from bottle data.

Dissolved oxygen was determined by the Winkler method as modified by Carpenter (1965), using the equipment and procedure outlined by Anderson (1971). A small number of oxygen values were discarded because contamination by rusty springs in the Niskin bottles resulted in low values. The bad springs caused greater problems with phosphate measurements. The precision of oxygen measurements is .01 ml/l and accuracy is 2%.

Silicate, phosphate, nitrate and nitrite were analyzed at sea using an autoanalyzer. The procedures used are similar to those described in Atlas *et al.* (1971). Artificial seawater was used as a standard for the first 19 stations; this resulted in high values for all nutrients and was corrected by reducing the absorbance slope by 6.25% for these stations. During the early part of the cruise, the springs in a large number of Niskin bottles rusted as a result of inadequate coating. Most rusty springs were replaced after station 21. Phosphate measurements were the most strongly affected; hence a large number of phosphate measurements have been deleted from stations 1 to 21. Two bottles continued to cause problems on subsequent stations; all phosphate values from these bottles have been deleted. Oxygen measurements were also affected, but apparently less severely; oxygens have been deleted from a smaller number of stations. Silicate, nitrate, nitrite, and salinity values were apparently unaffected by the rusted springs. Nitrate measurements on station 80 have been deleted because of problems with the cadmium column in the autoanalyzer. A portion of the silicate values on station 87 were adversely affected by a 2°C change in the laboratory temperature and have been deleted.

The precision of nutrient measurements is estimated to be less than .5% and accuracy is 2% to 3%.

#### *Conductivity/Temperature/Depth (CTD) Data*

A single Neil Brown Mark III CTD was used for all casts. The time series data were processed and calibrated by PACODF; the final product is a 2 db pressure series.

Pressure, temperature, and conductivity were sampled at 32 frames/second and recorded on audio tape. Output from the oxygen probe was updated at 8 frames/second and recorded with the other three parameters; it was not processed. The audio tapes were digitized following the cruise. There was no obvious increase in noise due to digitization following the cruise; however, gaps in the final data for stations 13 and 42 resulted from yoyo's made to compensate for the ends of audio tape reels.

Pressure, temperature and conductivity data were block-averaged in one second intervals. Values which were more than four standard deviations from the average were eliminated, the average was recalculated, and values more than 2 standard deviations from the average were discarded.

The CTD pressure transducer was calibrated in a temperature-controlled bath to the PACODF Ashcroft deadweight-tester pressure standard. Thermal response-time, thermal hysteresis and mechanical hysteresis were measured. The mechanical hysteresis loading curves were measured at 0°C and 23°C and at maximum loadings of 2225 and 8825 PSI. The transducer thermal response-time was derived from the pressure response to a thermal step change from 21°C to 0°C. There was no significant difference between pre- and post-cruise calibrations. Pressure calibrations were applied to the 1-second averages using a family of hysteresis curves based on the laboratory calculations. There was no significant drift in comparisons between CTD and thermometric pressures, based on reversing thermometers mounted on an average of 4 bottles on every cast. The mean difference between calibrated CTD pressures and thermometric pressures was 2.5 db.

The CTD platinum resistance thermometer was calibrated in a temperature-controlled bath to the PACODF Leeds and Northrup PRT temperature standard at 0°C, 10°C and 25°C. Calibrations were performed before and after the cruise: there was a .002 to .003° decrease in the CTD temperature reading. In addition to a constant second-order slope applied to all casts as a result of the PRT calibrations, an offset that was linear as a function of time was applied to the full cruise to compensate for the shift between pre- and post-cruise calibrations. The mean

difference between CTD temperatures and thermometer values was  $-0.0005^{\circ}\text{C}$ .

After pressure and temperature calibration, the up and downcast CTD salinities differed by no more than  $.001^{\circ}/_{\text{‰}}$  in the deep water, except on a few stations which had obvious offsets in conductivity.

Conductivity was calibrated using bottle salinities collected on the upcasts. Bottle sample conductivities were calculated from the sample salinities and from CTD pressures and temperatures. A conductivity slope correction was calculated as a third order least-squares fit to station number. After application of the slope correction, a conductivity offset for each cast was calculated and applied. All bottle samples were used for calibration with heavier weighting of samples below 1000 db. The mean difference between final CTD conductivities and sample conductivities was 0.00073 mhos. Additional offset corrections were made following comparisons of calibrated downcast salinities with bottle salinities in order to account for discontinuous shifts in the conductivity transducer response.

After processing the time series, a roll filter was applied to eliminate pressure reversals and a 2 db pressure series was constructed by block-averaging all 1-second values within each 2 db bin. The final data set contains .46% missing data or 727 of 168,549 data points. Most missing data are at single levels and result from block-averaging in one second intervals followed by pressure sequencing. Eleven of the 98 stations account for 423 missing values, or more than half. The only blocks of missing data are 3422-3438 db at station 13 and 4438-4484 db at station 42, both due to large yo-yo's occasioned by operator compensation for the end of audio tape recordings.

Seven upcasts were sent instead of downcasts because of major offsets or other instrument-related problems on the downcasts. The up-casts are stations 29, 50, 80, 82, 84, 85, and 89.

## DATA

The data presentation consists of the cruise track, vertical sections, listings of all discrete hydrographic data, a subsample of the CTD data, plots of temperature and salinity as a function of pressure, and plots of potential temperature as a function of salinity.

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## PERSONNEL

### Ship's Captain

Johnson, Curtis D., RV *Thomas Washington*

### Scientific personnel participating in collection of hydrographic/CTD data on RV *Thomas Washington*

deSzoeke, Roland, Professor (chief scientist), College of Oceanography, Oregon State University

Talley, Lynne D., Research Oceanographer (co-chief scientist), Ocean Research Division, Scripps Institution of Oceanography

Boaz, John, Marine Technician, STS, Scripps Institution of Oceanography

Field, Timothy J., Marine Technician, PACODF, Scripps Institution of Oceanography

Hester, Arthur W., Staff Research Associate, PACODF, Scripps Institution of Oceanography

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Moe, Ronald, Programmer, Shipboard Computer Group, Scripps Institution of Oceanography

Muus, David A., Staff Research Associate, PACODF, Scripps Institution of Oceanography

Paduan, Jeffrey, Graduate Student, College of Oceanography, Oregon State University

Wenzel, Jan, Graduate Student, University of Hawaii

### Additional personnel involved in data processing

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Delahoyde, Frank M., Programmer/Analyst, PACODF, Scripps Institution of Oceanography

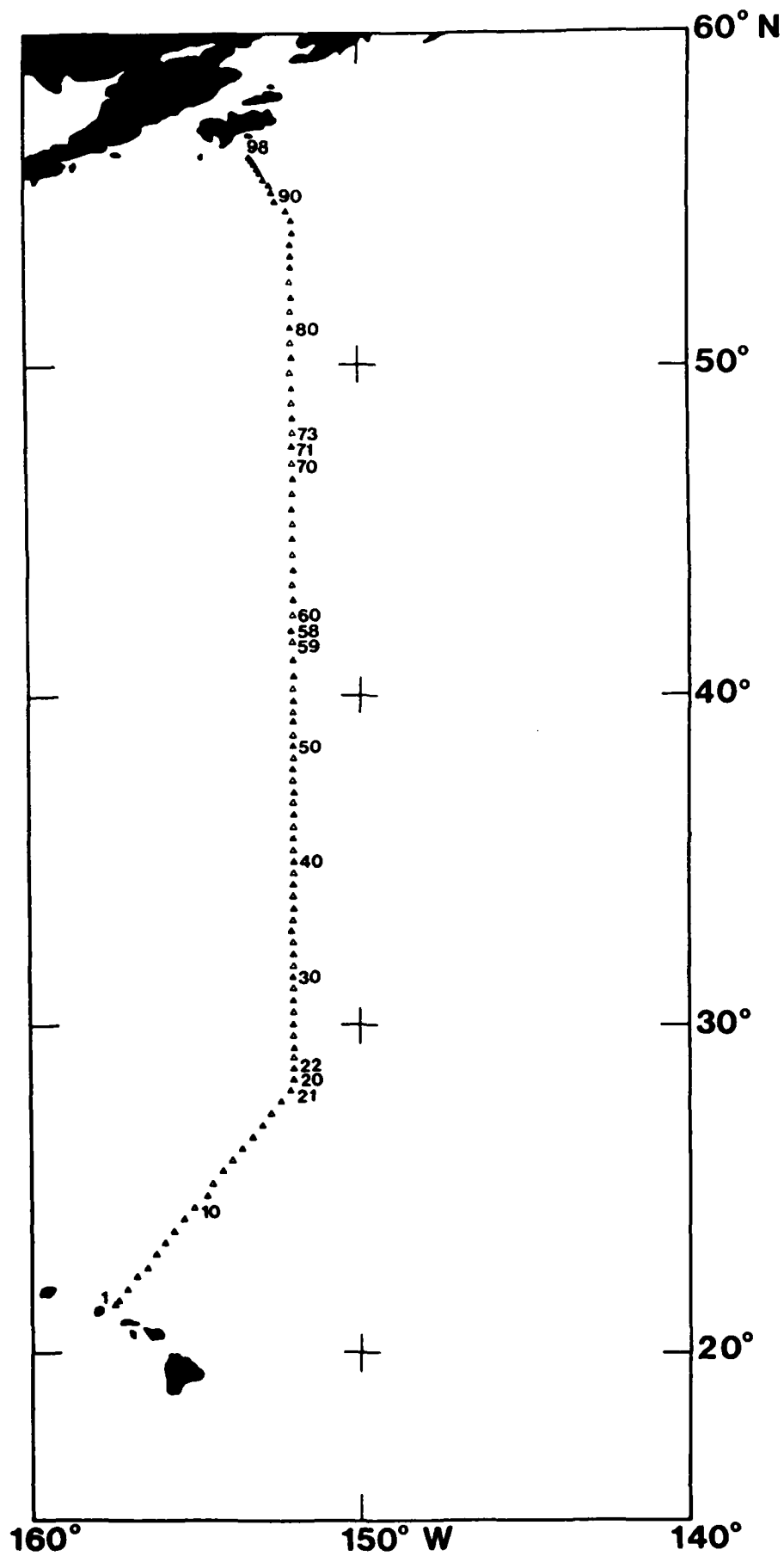
Johnson, Mary C., Staff Research Associate, PACODF, Scripps Institution of Oceanography

Sweet, Paul, Staff Research Associate, PACODF, Scripps Institution of Oceanography

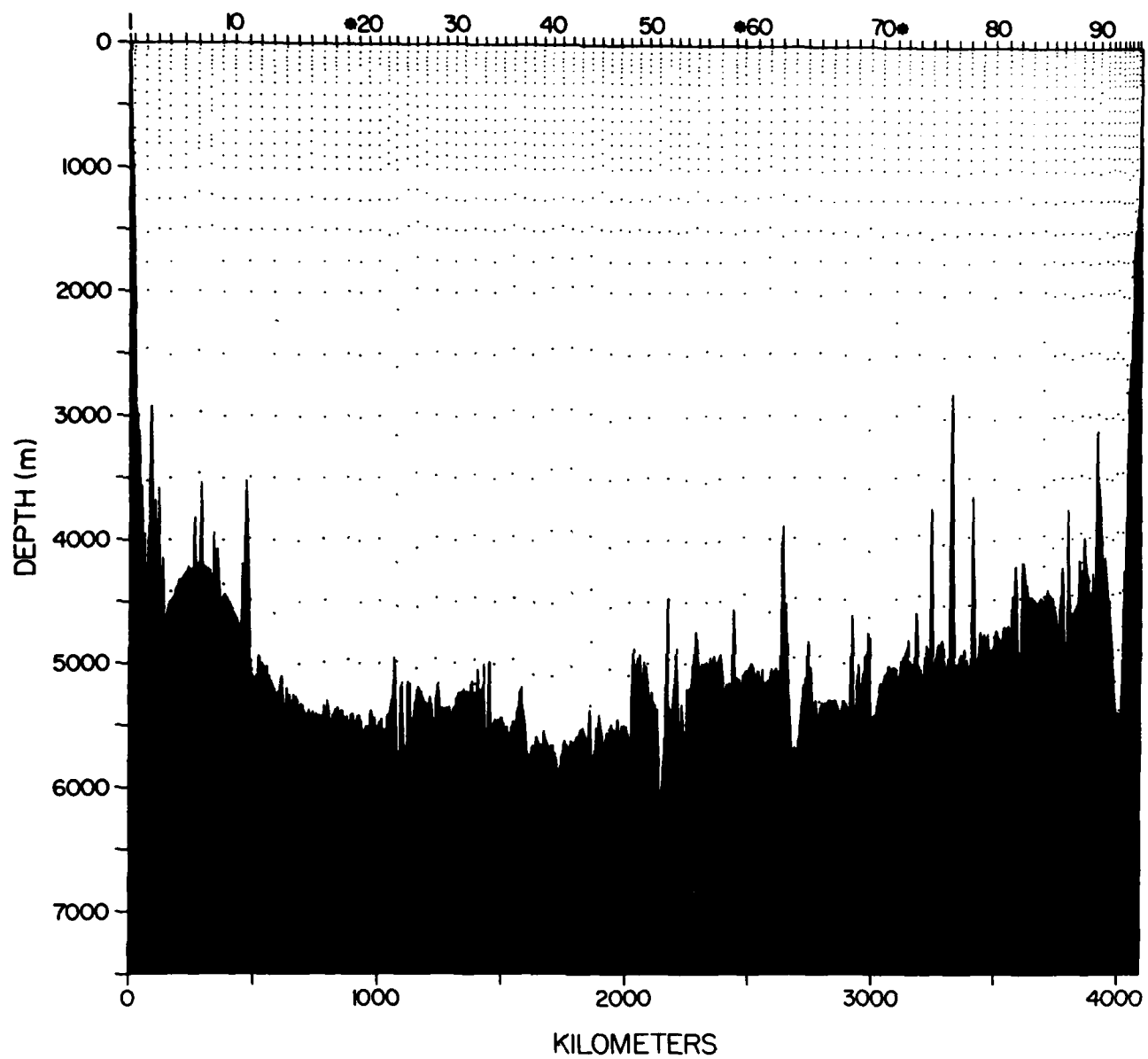
Wells, James A., Marine Technician, PACODF, Scripps Institution of Oceanography

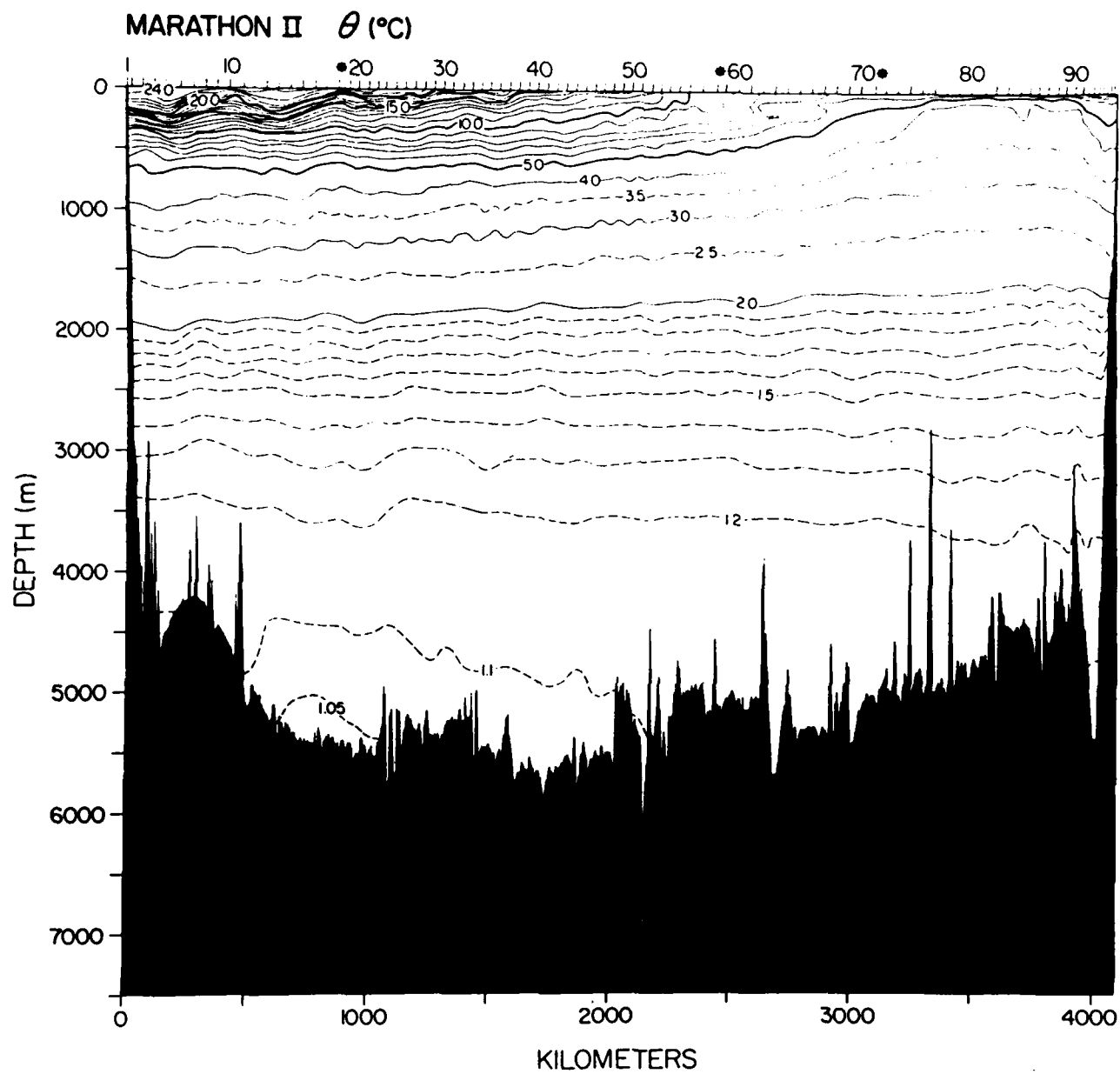
## FIGURES

- Figure 1. Station positions for the Marathon II section on the R/V *Thomas Washington*, May 4 - June 4, 1984.
- Figure 2. Bottle positions. Asterisks indicate irregularities in station numbering.
- Figure 3. Potential temperature section.
- Figure 4. Salinity section.
- Figure 5. Oxygen section.
- Figure 6. Silicate section.
- Figure 7. Phosphate section.
- Figure 8. Nitrate section.

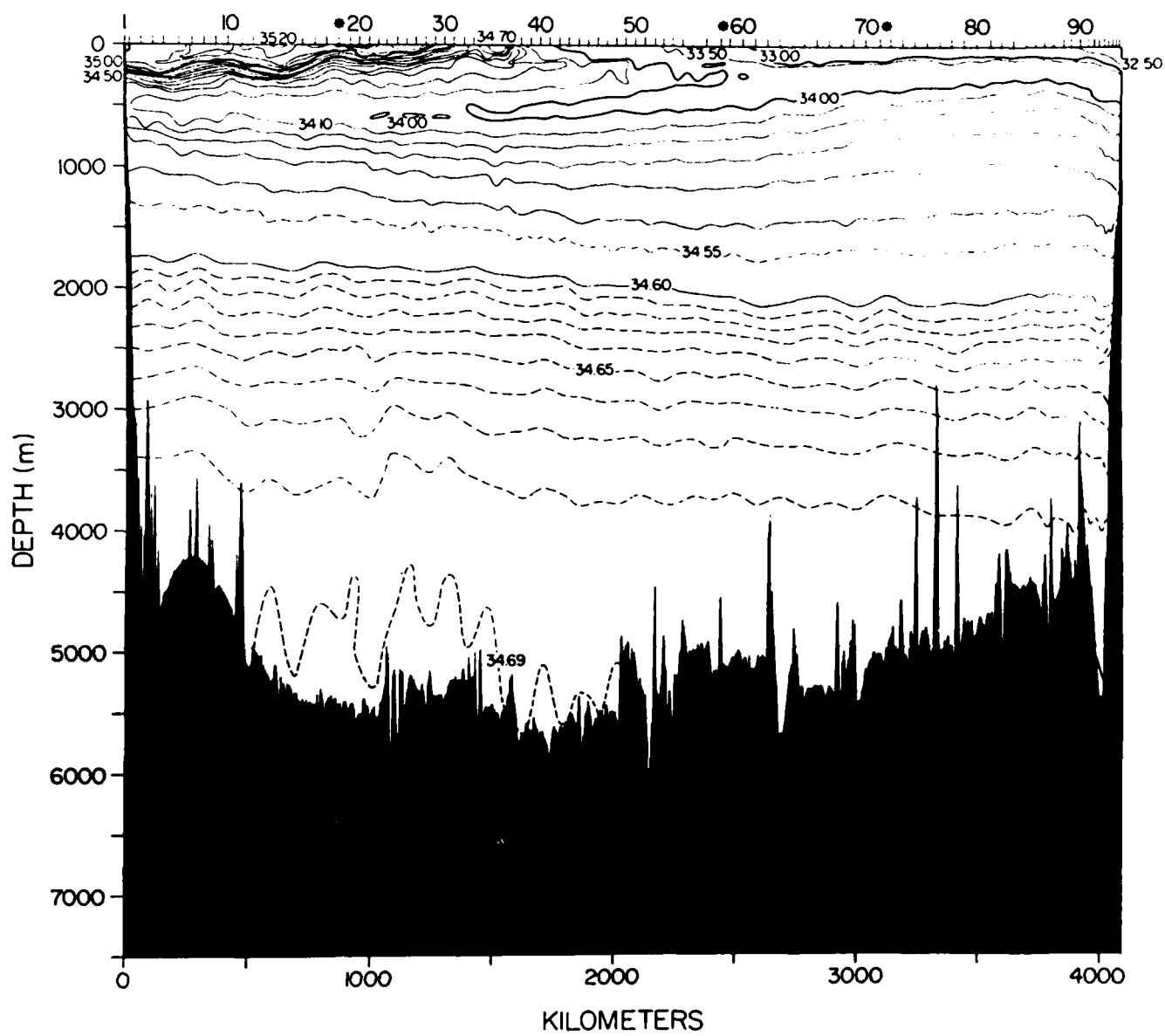


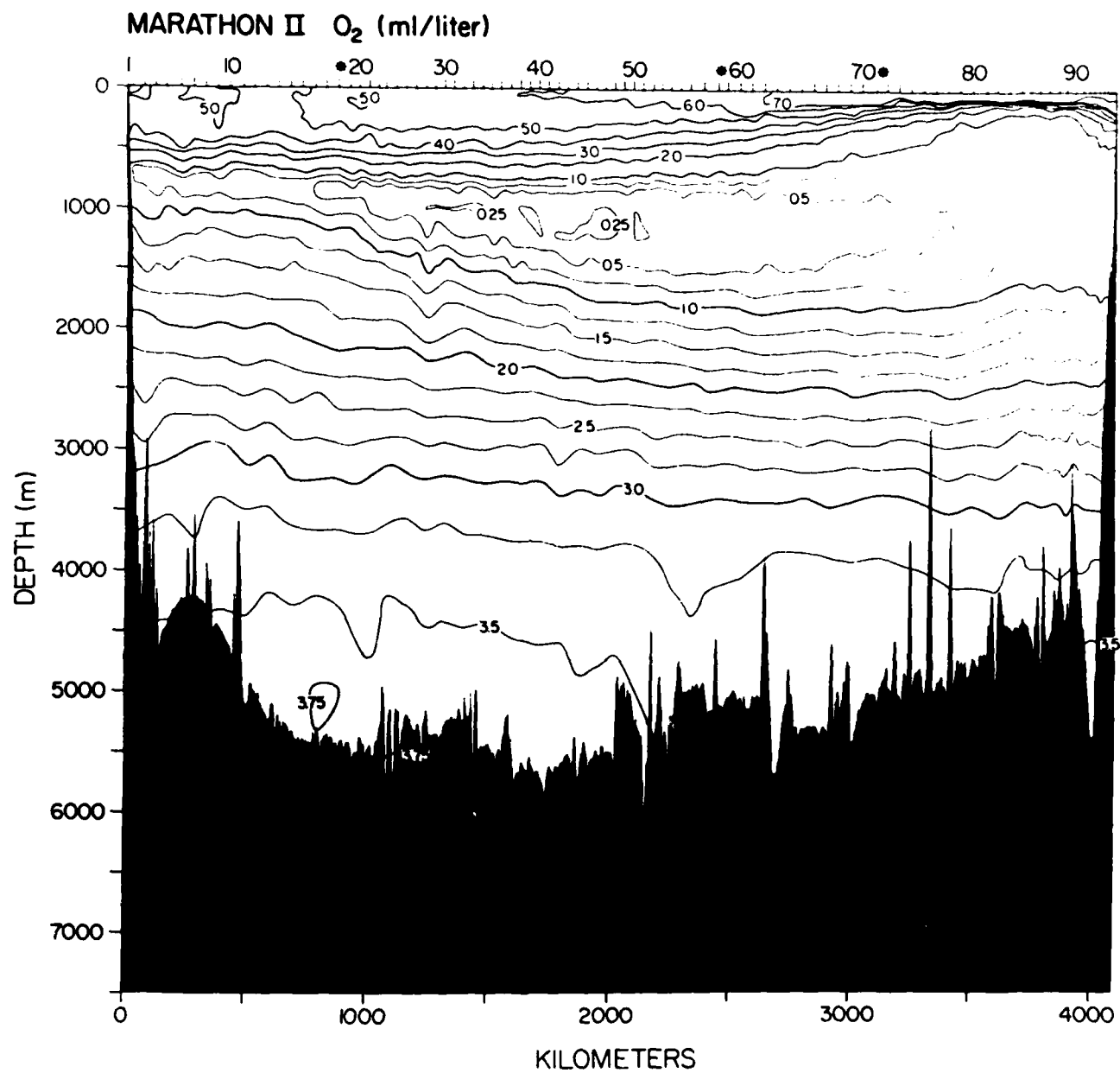


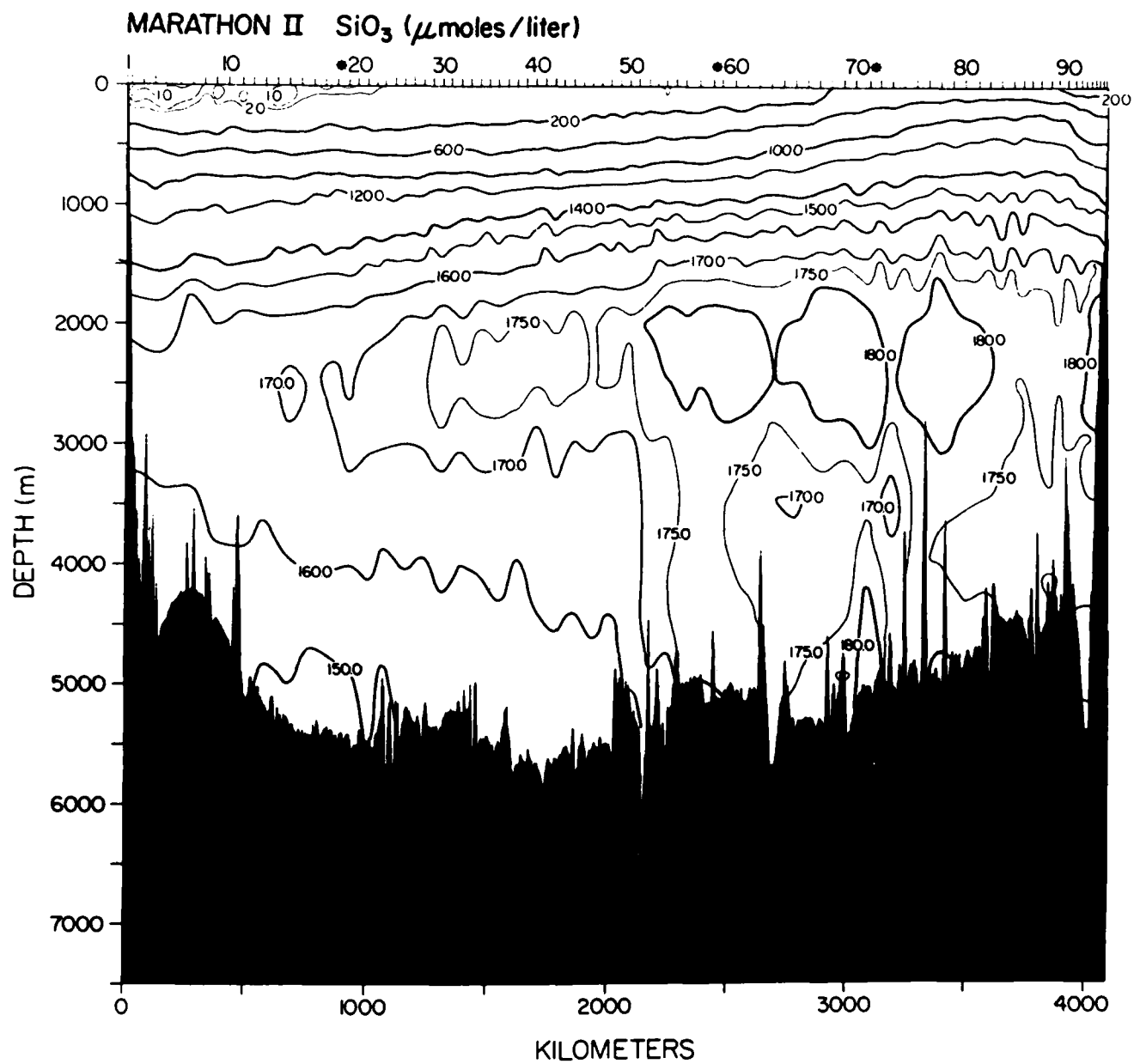


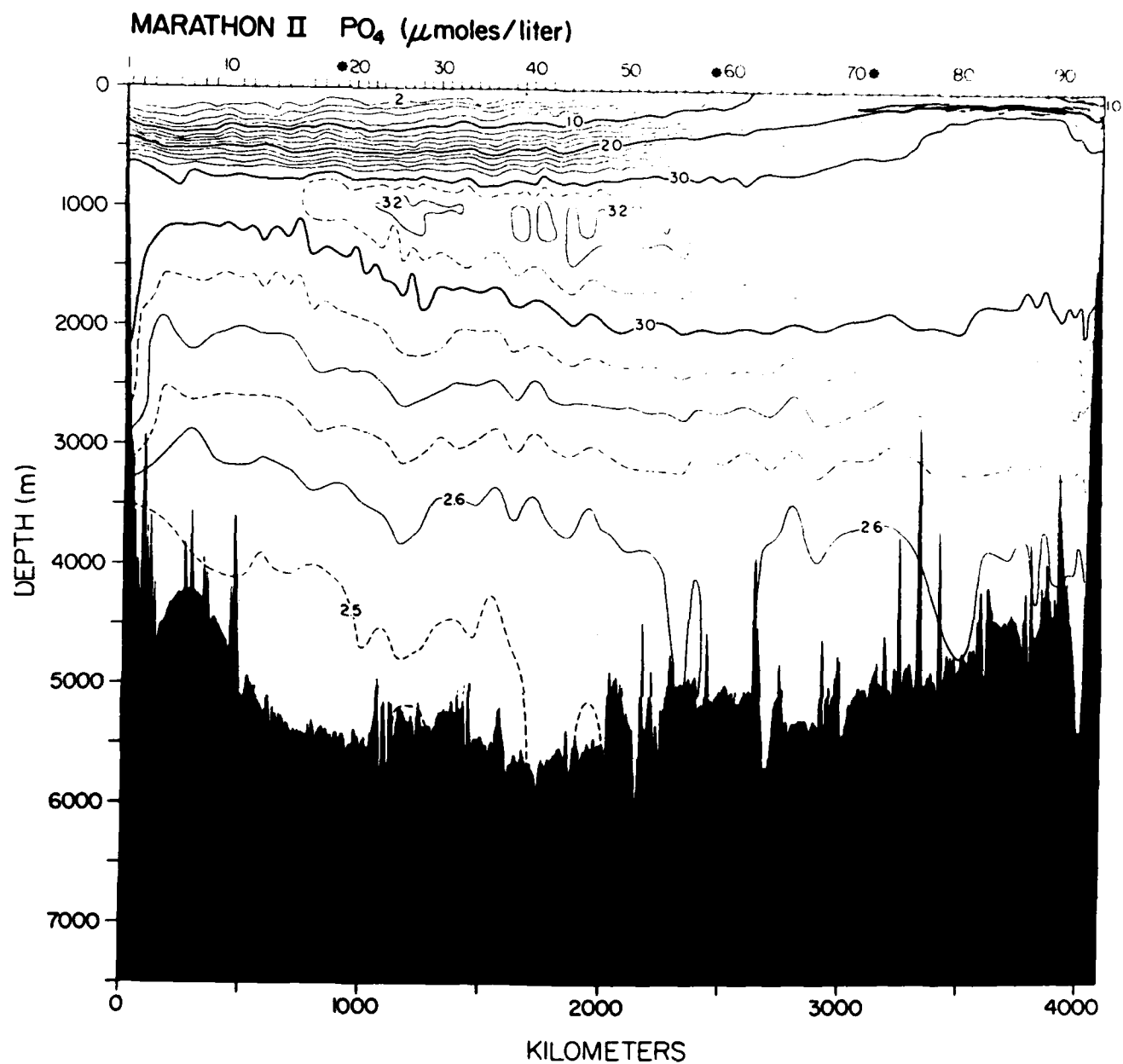


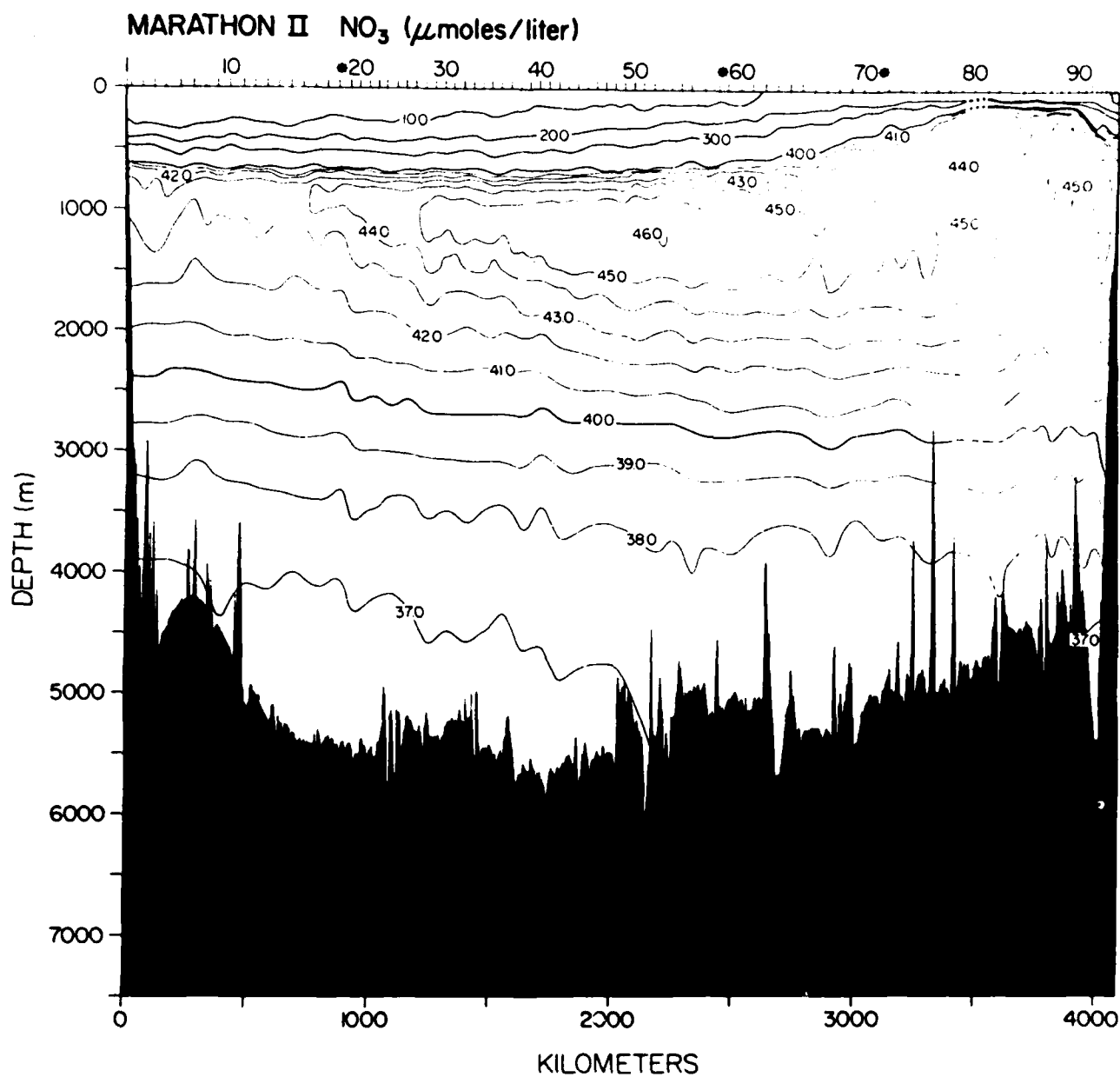
# MARATHON II SALINITY











R/V THOMAS WASHINGTON  
MARATHON LEG 2  
May 5, 1984 to June 4, 1984

Station #	Date GMT	Time GMT	Latitude	Longitude	Depth M	Number of Samples
1	05/05/84	736	21 28.1 N	157 28.4 W	746	11
2	05/05/84	1342	21 35.9 N	157 21.1 W	3000	18
3	05/05/84	2054	21 57.2 N	157 4.5 W		18
4	05/06/84	724	22 18.0 N	156 48.0 W	3905	16
5	05/06/84	1330	22 30.5 N	156 26.0 W	4439	22
6	05/06/84	1942	23 2.5 N	156 18.1 W		19
7	05/07/84	130	23 23.5 N	155 55.7 W	4194	23
8	05/07/84	818	23 45.0 N	155 38.4 W	4340	16
9	05/07/84	1436	24 6.0 N	155 21.0 W	4364	23
10	05/07/84	2042	24 28.0 N	155 3.6 W	3128	17
11	05/08/84	306	24 48.3 N	154 37.8 W	5144	23
12	05/08/84	800	25 11.0 N	154 28.6 W	4990	17
13	05/08/84	1500	25 32.5 N	154 11.0 W	5266	23
14	05/08/84	2042	25 54.0 N	153 53.4 W	5400	18
15	05/09/84	300	26 15.5 N	153 35.7 W	5382	24
16	05/09/84	854	26 36.4 N	153 16.4 W	5322	17
17	05/09/84	1454	26 59.2 N	152 57.7 W	5493	24
18	05/09/84	2054	27 20.0 N	152 41.9 W	5379	18
19	05/10/84	242	27 41.6 N	152 23.6 W	5513	23
20	05/10/84	1024	28 21.3 N	152 0.4 W	5482	17
21	05/11/84	224	28 1.9 N	152 6.0 W	5544	23
22	05/11/84	942	28 42.5 N	152 0.3 W	5602	24
23	05/12/84	1312	29 2.8 N	152 0.1 W	5611	17
24	05/12/84	2036	29 21.3 N	151 59.8 W	5363	24
25	05/13/84	324	29 43.8 N	152 0.8 W	5586	17
26	05/13/84	918	30 4.6 N	152 0.8 W	5317	24
27	05/13/84	1524	30 26.4 N	152 0.3 W	5312	17
28	05/13/84	2124	30 47.5 N	152 0.0 W	5435	24
29	05/14/84	524	31 8.9 N	152 0.0 W	5420	17
30	05/14/84	1112	31 29.8 N	152 0.7 W	5458	24
31	05/14/84	1718	31 50.3 N	151 59.2 W	5219	17
32	05/14/84	2306	32 12.3 N	152 0.4 W	5293	23
33	05/15/84	530	32 32.8 N	152 0.6 W	5229	17
34	05/15/84	1212	32 54.3 N	152 2.7 W	5503	24
35	05/15/84	1854	33 14.4 N	152 0.6 W	5456	17
36	05/16/84	124	33 35.2 N	151 59.6 W	5461	24
37	05/16/84	736	33 56.5 N	151 59.8 W	5015	17
38	05/16/84	1418	34 18.4 N	152 0.1 W	5687	24
39	05/16/84	2048	34 39.3 N	151 59.8 W	5663	17
40	05/17/84	324	35 0.0 N	151 59.2 W	5722	24
41	05/17/84	942	35 20.7 N	151 59.5 W	5798	17
42	05/17/84	1630	35 42.6 N	151 59.9 W	5611	24
43	05/17/84	2254	36 3.2 N	151 59.8 W	5529	17
44	05/18/84	542	36 24.8 N	151 59.5 W	5374	24
45	05/18/84	1600	36 46.2 N	151 59.9 W	5528	17
46	05/18/84	2224	37 6.5 N	151 58.8 W	5539	24
47	05/19/84	436	37 27.1 N	152 0.7 W	5565	17
48	05/19/84	1036	37 48.0 N	152 0.4 W	5886	24
49	05/19/84	1642	38 8.8 N	151 59.2 W	4936	17
50	05/19/84	2224	38 30.3 N	152 0.3 W	5255	24
51	05/19/84	430	38 50.9 N	151 59.1 W	5358	17
52	05/20/84	1042	39 14.3 N	151 59.2 W	5503	22
53	05/20/84	1724	39 33.3 N	152 0.4 W	5157	16
54	05/21/84	418	39 52.9 N	151 59.8 W	5606	24



55	05/21/84	1118	40 15.2 N	152 0.3 W	4885	14
56	05/22/84	736	40 37.4 N	151 59.0 W	4993	24
57	05/22/84	1424	41 6.8 N	151 59.5 W	4959	24
58	05/23/84	706	41 59.1 N	152 3.0 W	5103	24
59	05/23/84	1254	41 38.9 N	151 59.7 W	5090	17
60	05/24/84	948	42 27.6 N	151 59.5 W	5111	17
61	05/24/84	1624	42 55.2 N	151 58.8 W	5149	24
62	05/24/84	2348	43 23.0 N	152 0.4 W	4762	17
63	05/25/84	618	43 49.7 N	151 59.4 W	5689	24
64	05/25/84	1212	44 17.6 N	152 1.0 W	5096	17
65	05/25/84	1724	44 45.3 N	152 0.0 W	5305	24
66	05/25/84	2312	45 12.6 N	151 59.8 W	5298	17
67	05/26/84	518	45 39.9 N	152 0.6 W	5374	24
68	05/26/84	1118	46 7.3 N	151 59.9 W	5322	17
69	05/26/84	1730	46 34.7 N	151 59.0 W	4854	24
70	05/26/84	2348	47 2.3 N	151 59.6 W	5206	17
71	05/27/84	554	47 34.2 N	151 59.8 W	5009	24
73	05/27/84	1206	47 57.9 N	151 59.7 W	4849	17
74	05/27/84	1924	48 25.0 N	151 59.0 W	5019	24
75	05/28/84	254	48 52.2 N	152 0.1 W	4058	17
76	05/28/84	900	49 19.7 N	151 59.4 W	4996	24
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79	05/29/84	418	50 42.4 N	152 0.7 W	4993	16
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82	05/29/84	2324	52 4.7 N	151 58.2 W	4965	24
83	05/30/84	530	52 32.0 N	152 0.6 W	4467	17
84	05/30/84	1136	52 59.9 N	151 59.4 W	4448	24
85	05/30/84	1948	53 20.5 N	151 58.9 W	4531	24
86	05/31/84	212	53 41.1 N	151 58.9 W	4846	24
87	05/31/84	842	54 0.5 N	151 56.1 W	4572	24
88	05/31/84	1530	54 23.1 N	151 57.8 W	4156	24
89	05/31/84	2218	54 40.2 N	152 5.3 W	4316	24
90	06/01/84	518	54 57.4 N	152 23.9 W	4127	24
91	06/01/84	1218	55 13.9 N	152 31.5 W	4451	24
92	06/01/84	1900	55 25.6 N	152 38.1 W	5155	24
93	06/02/84	154	55 35.9 N	152 46.3 W	5377	24
94	06/02/84	806	55 46.6 N	152 53.0 W	4405	24
95	06/02/84	1336	55 56.3 N	152 57.6 W	2665	23
96	06/02/84	1824	56 4.0 N	153 2.7 W	1801	18
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98	06/03/84	218	56 18.0 N	153 12.4 W	303	8

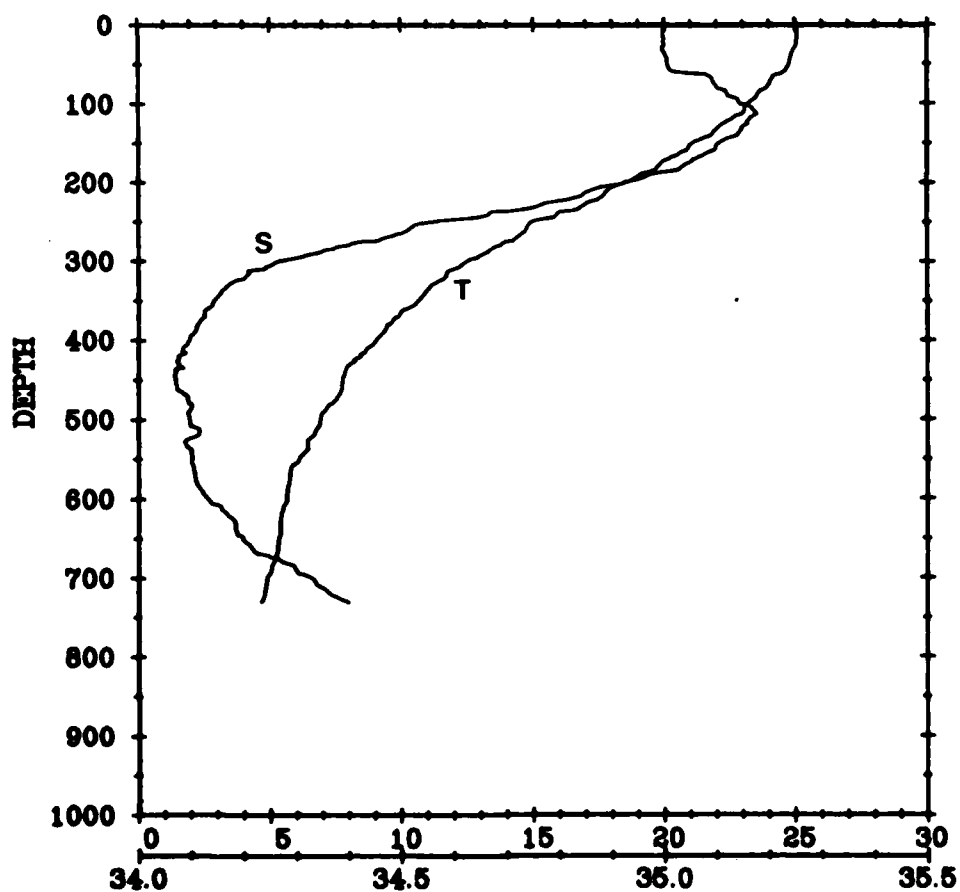
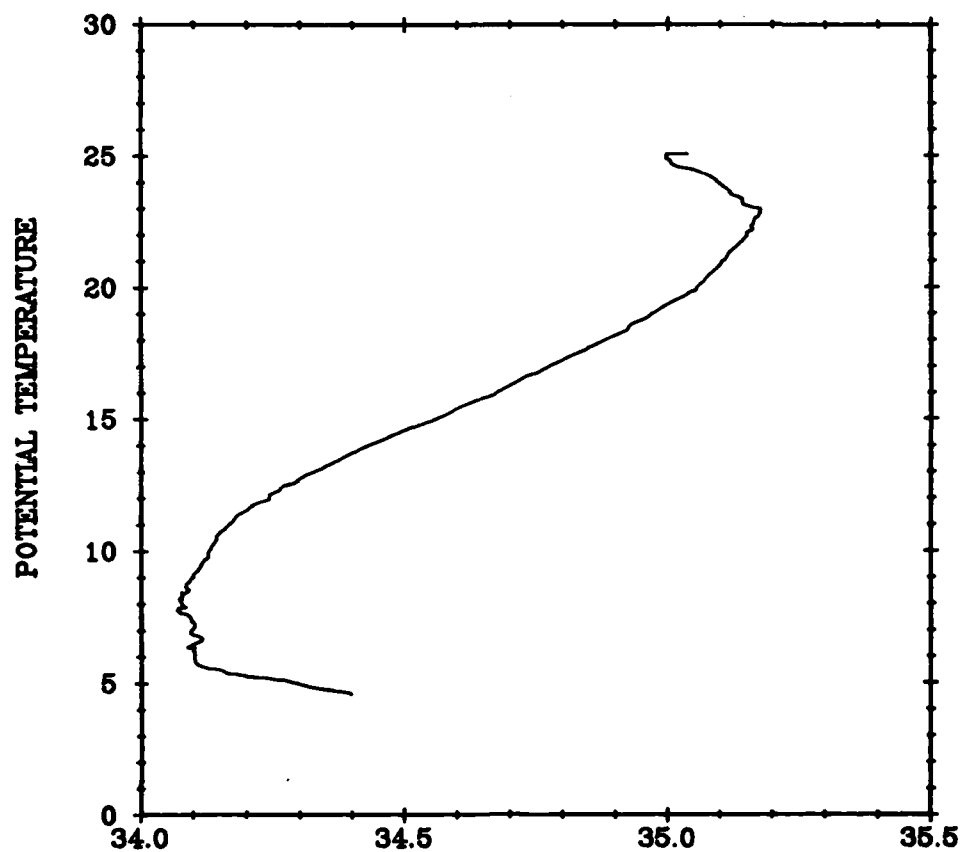
R/V THOMAS WASHINGTON MARATHON LEG II STATION 1

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	N	DIR	KT	DEG C	DEG C	MB
21 28 1N	157 28 4W	5/ 5/84	736	746	80	11	23 9	22 2	1017 6

CTD DATA		SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
PRESS	TEMP								
DB	DEG C		DEG C				CL/TON		M
0	25.065	35.005	25.065	23.327	31.635	39.587	454.264	0.000	0
20	25.037	34.997	25.033	23.331	31.639	39.593	454.749	0.091	19
40	24.839	35.002	24.830	23.396	31.710	39.668	449.370	0.191	39
60	24.472	35.039	24.459	23.536	31.859	39.826	436.856	0.270	59
80	23.838	35.105	23.821	23.775	32.115	40.097	414.795	0.355	79
100	23.227	35.149	23.206	23.989	32.344	40.341	395.250	0.416	99
150	21.192	35.111	21.163	24.535	32.949	41.001	344.891	0.621	149
200	19.518	34.924	19.483	25.095	33.593	41.725	292.931	0.781	199
250	18.202	34.574	18.164	25.608	34.224	42.465	244.695	0.915	249
300	17.547	34.279	17.507	25.932	34.551	42.989	214.119	1.030	299
350	16.614	34.146	16.572	26.187	34.986	43.399	190.013	1.131	349
400	9.059	34.098	9.015	26.410	35.276	43.752	168.816	1.220	399
450	7.767	34.071	7.722	26.585	35.510	44.040	151.976	1.301	447
500	6.929	34.097	6.882	26.724	35.687	44.253	138.844	1.373	497
600	5.601	34.128	5.550	26.919	35.946	44.572	120.149	1.503	596
700	4.946	34.313	4.890	27.143	36.203	44.854	99.324	1.613	695
736	4.631	34.399	4.573	27.247	36.318	44.986	89.470	1.647	731

NISKIN BOTTLE DATA		DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
DEPTH	TEMP												
M	DEG C	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
47	24.886	35.001	4.85	102.4	2.1	0.19	0.0	0.00	24.876	23.381	31.694	39.651	47
97	23.195	35.173	4.83	99.1	1.6	0.20	0.0	0.00	23.175	24.016	32.172	40.370	97
147	21.066	35.105	4.49	88.7	1.8	0.28	1.4	0.08	21.038	24.565	32.982	41.038	147
195	18.371	34.927	4.45	83.5	3.4		3.7	0.01	18.337	25.134	33.637	41.773	195
295	12.175	34.248	4.33	71.4	11.8		12.0	0.08	12.136	25.979	34.713	43.065	296
395	9.530	34.119	4.37	68.0	22.5		18.6	0.03	9.485	26.350	35.195	43.652	396
497	7.121	34.101	2.58	38.0	52.2	2.25	30.9	0.01	7.073	26.701	35.655	44.213	499
594	5.637	34.127	1.28	18.2	75.6	2.84	38.8	0.00	5.586	26.914	35.938	44.563	597
690	4.961	34.316	0.77	10.8	93.3		41.9	0.03	4.905	27.144	36.199	44.853	694
705	4.844	34.339	0.80	11.2	95.9	3.09	42.3	0.01	4.787	27.176	36.236	44.895	709
730	4.623	34.401	0.95	11.8	100.0		42.5	0.04	4.565	27.249	36.321	44.989	734

# MARATHON 2 STA. 1



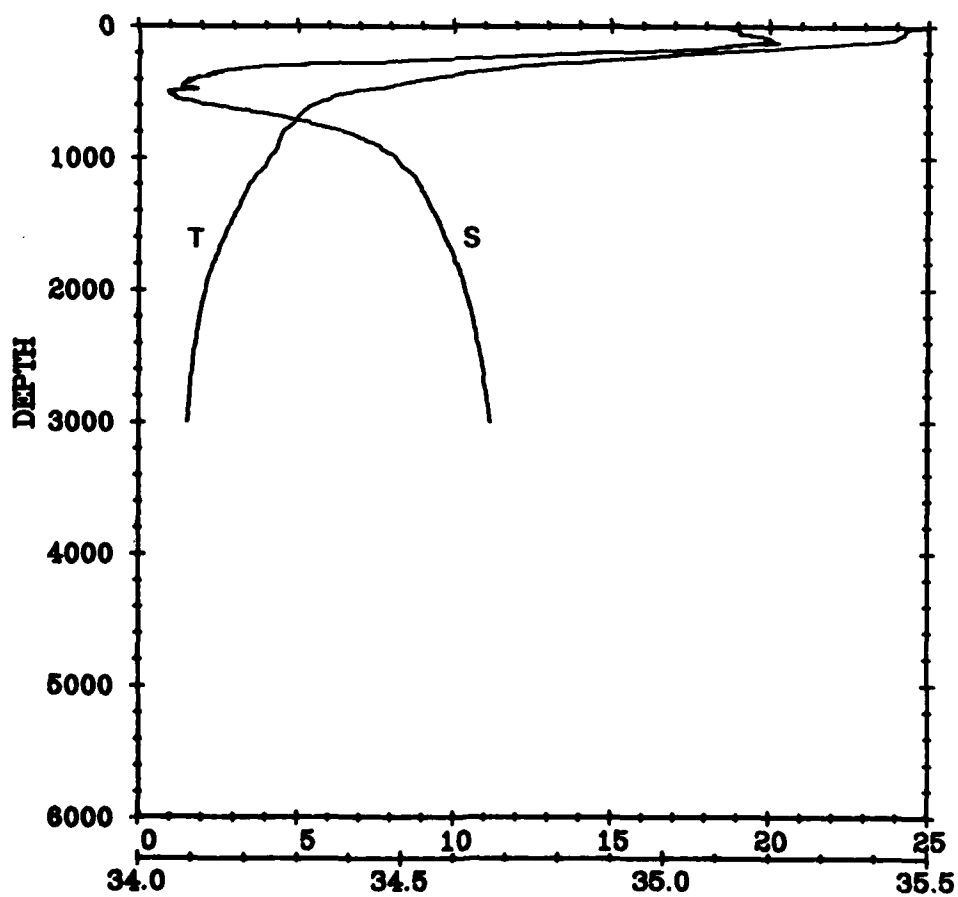
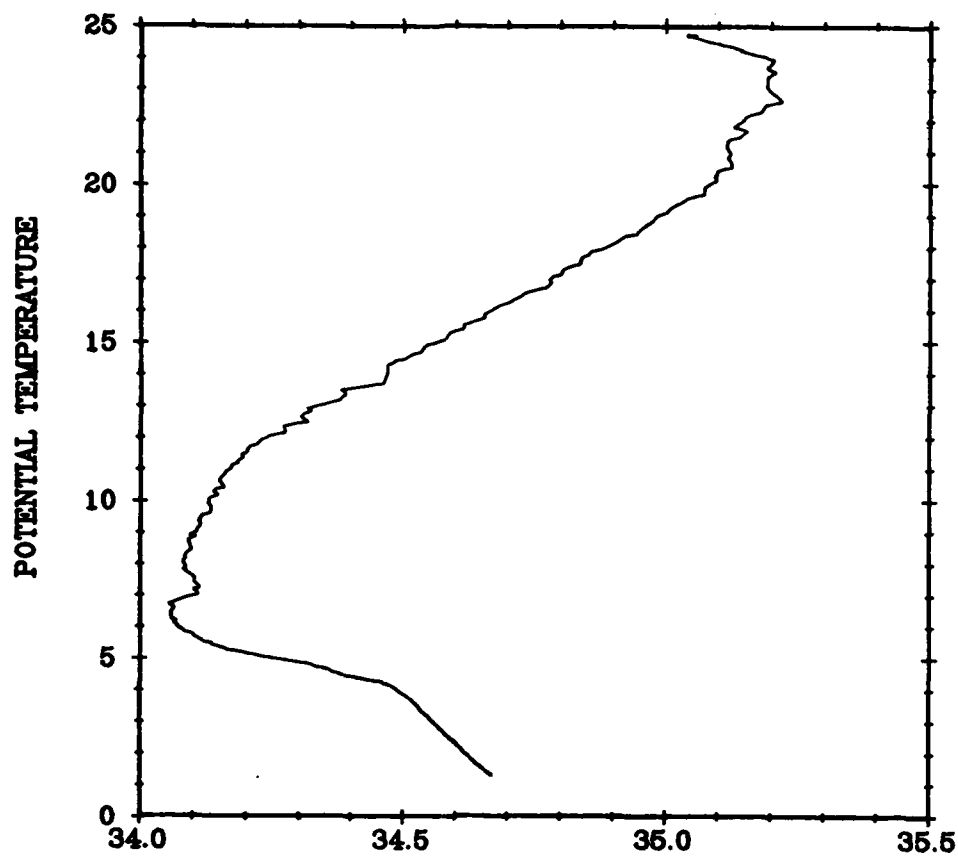
R/V THOMAS WASHINGTON MARATHON LEG II STATION 2

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
21 35 9N	157 21 1W	5/ 5/84	1342	3300	90	12	23 6	21 7	1015.2

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	24 616	35 063	24 616	23 507	31 925	39 798	437.101	0.000	0
20	24 346	35 121	24 342	23 513	31 958	39 927	425 901	0.086	19
40	24 259	35 140	24 251	23 575	32 002	39 973	422 767	0.171	39
60	24 214	35 146	24 201	23 694	32 022	39 995	421 770	0.256	59
80	24 060	35 179	24 043	23 766	32 098	40 074	415 730	0.339	79
100	23 914	35 199	23 893	23 825	32 161	40 141	410 869	0.422	99
150	21 357	35 131	21 328	24 505	32 914	40 962	347 773	0.512	149
200	18 348	34 918	18 313	25 133	33 637	41 773	299 291	0.771	199
250	15 422	34 604	15 383	25 583	34 130	42 423	247 210	0.905	249
300	12 490	34 289	12 450	25 951	34 672	43 012	212 306	1.020	299
350	10 667	34 152	10 625	26 182	34 979	43 390	190 486	1.121	349
400	9 268	34 109	9 224	26 385	35 242	43 709	171 333	1.211	399
450	8 168	34 084	8 122	26 536	35 443	43 956	156 967	1.293	447
500	6 822	34 066	6 776	26 714	35 692	44 254	139 659	1.367	497
600	5 540	34 129	5 490	26 977	35 957	44 586	119 299	1.497	596
700	4 992	34 277	4 935	27 119	36 164	44 817	102 562	1.608	695
800	4 548	34 383	4 485	27 244	36 320	44 992	90 292	1.704	795
900	4 356	34 448	4 286	27 317	36 432	45 033	84 090	1.791	894
1000	4 106	34 487	4 030	27 375	36 472	45 165	79 281	1.873	993
1100	3 842	34 511	3 759	27 422	36 533	45 238	74 971	1.950	1092
1200	3 492	34 532	3 404	27 474	36 603	45 325	70 313	2.022	1190
1300	3 289	34 545	3 195	27 504	36 644	45 376	67 360	2.091	1289
1400	3 106	34 557	3 005	27 521	36 691	45 423	64 971	2.157	1388
1500	2 995	34 571	2 778	27 563	36 724	45 477	61 935	2.221	1487
1600	2 719	34 592	2 606	27 587	36 757	45 519	59 728	2.282	1586
1700	2 533	34 594	2 414	27 613	36 794	45 565	57 162	2.340	1684
1800	2 389	34 601	2 264	27 631	36 820	45 599	55 423	2.396	1781
1900	2 212	34 613	2 091	27 655	36 854	45 642	52 873	2.450	1882
2000	2 108	34 620	1 970	27 670	36 875	45 668	51 533	2.503	1980
2100	2 011	34 627	1 866	27 683	36 894	45 693	50 244	2.554	2079
2200	1 922	34 634	1 770	27 696	36 912	45 716	49 022	2.603	2177
2300	1 846	34 639	1 686	27 707	36 927	45 735	48 077	2.652	2275
2400	1 796	34 643	1 628	27 714	36 938	45 749	47 509	2.700	2374
2500	1 722	34 649	1 547	27 725	36 953	45 768	46 465	2.747	2472
2600	1 682	34 653	1 499	27 732	36 963	45 790	45 983	2.793	2570
2700	1 644	34 657	1 452	27 738	36 972	45 792	45 512	2.839	2669
2800	1 609	34 661	1 409	27 745	36 980	45 802	45 065	2.884	2767
2900	1 579	34 665	1 370	27 751	36 998	45 813	44 672	2.929	2865
3000	1 546	34 669	1 328	27 757	36 997	45 823	44 224	2.973	2961
3038	1 540	34 670	1 319	27 758	36 999	45 826	44 179	2.990	3000

NISKIN BOTTLE DATA														
DEPTH M	TEMP DEG C	SALINITY	DIS O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUSIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
24	24 352	35 120D	4 95	103 6						24 347	23 631	31 956	39 925	24
53	24 203	35 146	4 99	104 2	1.9	0.16	0 0	0 00		24 192	23 697	32 025	39 998	53
79	23 998	35 192	5 01	104 3	1.0	0.13	0 0	0 00		23 981	23 794	32 128	40 105	79
129	22 501	35 197	4 74	96 1	0 9	0 18	0 2	0 13		22 475	24 227	32 602	40 619	129
180	20 327	35 089	4 53	88 2	1 4	0 31	1 9	0 03		20 293	24 773	33 193	41 270	180
281	13 340	34 360	4 52	76 5	8 3	0 84	9 8	0 00		13 300	25 837	34 524	42 832	282
380	9 494	34 110D								9 451	26 349	35 195	43 653	381
481	7 238	34 100	2 70	39 9	49 5	2 26	29 9	0 00		7 191	26 683	35 632	44 185	483
681	4 958	34 289	0 65	9 1	92 6	3 26	42 3	0 00		4 903	27 123	36 178	44 933	685
782	4 532	34 388	0 74	10 3	102 9		43 2	0 00		4 470	27 249	36 325	44 999	786
882	4 315	34 460	0 84	11 6	106 0		43 2	0 00		4 246	27 331	36 417	45 100	887
982	4 031	34 493	0 94	12 9	112 4		43 2	0 03		3 956	27 387	36 488	45 194	988
1232	3 314	34 542	1 34	19 0	127 5		42 8	0 00		3 224	27 499	36 637	45 368	1241
1481	2 534	34 574	1 54	20 5	139 2		42 4	0 01		2 728	27 569	36 734	45 489	1493
1733	2 453	34 599	1 83	24 1	148 5	3 14	41 9	0 00		2 311	27 624	36 809	45 584	1749
1989	2 128	34 618	2 11	27 6	155 6	3 07	41 0	0 00		1 989	27 667	36 870	45 663	2008
2499	1 729	34 650	2 51	32 4	167 5	2 95	39 8	0 01		1 551	27 725	36 953	45 768	2527
3001	1 540	34 670	2 86	36 7	164 3		38 6	0 02		1 318	27 758	36 999	45 825	3038

# MARATHON 2 STA. 2



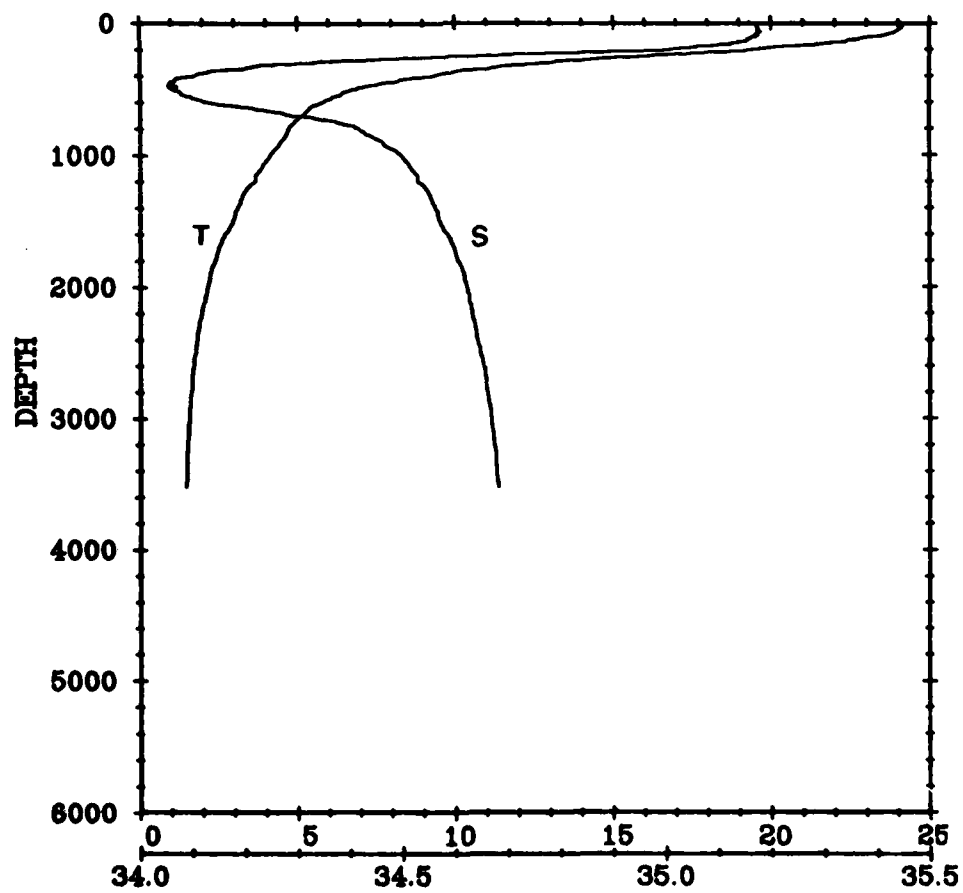
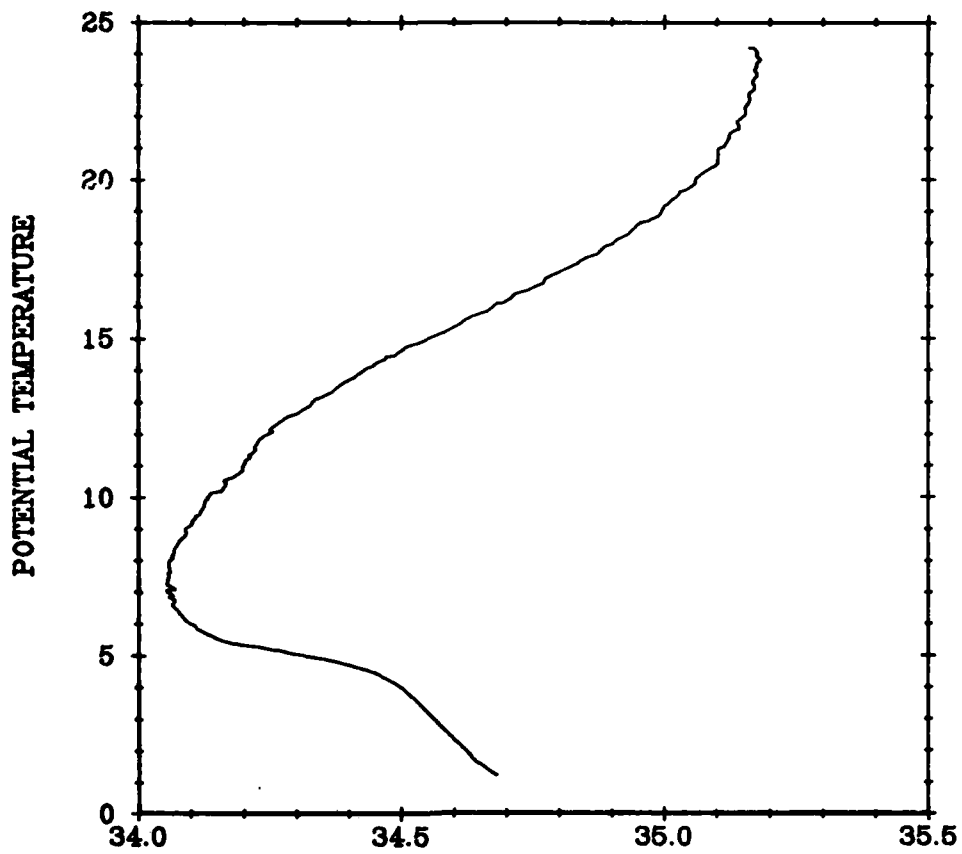
R/V THOMAS WASHINGTON MARATHON LEG II STATION 3

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
21 57 2N	157 4 5W	5/ 5/84	2054		100	12	25.0	22.8	1015.9

STD DATA										
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	GVA	DYNAMIC HT	DEPTH	
DB	DEG C		DEG C				CL/TON		M	
0	24.157	35.168	24.167	23.721	32.050	40.323	416.692	0.000	0	
20	24.131	35.172	24.127	23.735	32.066	40.340	416.100	0.083	19	
40	24.055	35.174	24.057	23.758	32.090	40.366	414.851	0.166	39	
60	23.944	35.175	23.931	23.796	32.131	40.410	412.021	0.249	59	
80	23.724	35.176	23.707	23.863	32.204	40.489	406.463	0.331	79	
100	23.315	35.171	23.294	23.980	32.332	40.327	396.104	0.411	99	
150	21.924	35.142	21.894	24.357	32.749	40.781	362.015	0.601	149	
200	19.499	35.021	19.463	24.919	33.386	41.487	309.892	0.769	199	
250	16.124	34.686	16.084	25.488	34.069	42.279	256.522	0.910	249	
300	13.124	34.339	13.083	25.865	34.561	42.877	220.816	1.030	298	
350	10.967	34.193	10.924	26.161	34.945	43.143	192.700	1.133	348	
400	9.282	34.104	9.238	26.379	35.235	43.302	171.927	1.224	398	
450	7.921	34.061	7.876	26.555	35.473	43.397	154.992	1.306	447	
500	6.829	34.061	6.782	26.709	35.677	44.249	140.126	1.380	497	
600	5.797	34.122	5.745	26.891	35.908	44.525	123.111	1.511	596	
700	5.146	34.279	5.109	27.091	36.137	44.782	104.579	1.625	695	
800	4.699	34.412	4.635	27.250	36.319	44.983	89.975	1.722	795	
900	4.458	34.457	4.387	27.313	36.393	45.069	84.668	1.810	894	
1000	4.113	34.494	4.056	27.378	36.474	45.165	78.890	1.891	993	
1100	3.847	34.515	3.764	27.424	36.535	45.240	74.736	1.968	1092	
1200	3.638	34.529	3.549	27.457	36.579	45.294	71.984	2.042	1191	
1300	3.282	34.535	3.188	27.539	36.684	45.382	66.908	2.111	1289	
1400	3.105	34.561	3.004	27.634	36.684	45.425	64.655	2.177	1388	
1500	2.956	34.569	2.849	27.555	36.713	45.462	62.912	2.241	1487	
1600	2.716	34.582	2.623	27.585	36.755	45.516	59.912	2.302	1586	
1700	2.525	34.595	2.406	27.614	36.795	45.567	56.993	2.361	1684	
1800	2.398	34.604	2.273	27.632	36.821	45.599	55.102	2.417	1783	
1900	2.237	34.614	2.105	27.654	36.852	45.638	53.103	2.471	1882	
2000	2.154	34.621	2.015	27.667	36.869	45.661	52.025	2.523	1980	
2100	2.041	34.626	1.915	27.679	36.897	45.683	50.918	2.575	2079	
2200	1.957	34.632	1.804	27.692	36.905	45.708	49.606	2.625	2177	
2300	1.854	34.637	1.704	27.704	36.923	45.730	48.450	2.674	2275	
2400	1.815	34.641	1.647	27.711	36.934	45.744	47.898	2.722	2374	
2500	1.755	34.645	1.579	27.720	36.947	45.760	47.110	2.770	2472	
2600	1.692	34.652	1.508	27.730	36.960	45.777	46.187	2.817	2570	
2700	1.652	34.657	1.460	27.738	36.971	45.790	45.618	2.863	2669	
2800	1.613	34.659	1.412	27.741	36.976	45.797	45.534	2.908	2767	
2900	1.583	34.664	1.374	27.750	36.987	45.811	44.799	2.953	2865	
3000	1.560	34.667	1.342	27.754	36.993	45.819	44.562	2.998	2963	
3100	1.535	34.673	1.308	27.759	37.000	45.828	44.287	3.042	3061	
3200	1.511	34.673	1.275	27.764	37.007	45.836	44.015	3.087	3159	
3300	1.480	34.677	1.234	27.770	37.015	45.846	43.560	3.130	3257	
3400	1.476	34.678	1.221	27.772	37.017	45.849	43.701	3.174	3355	
3500	1.466	34.680	1.201	27.775	37.022	45.854	43.678	3.218	3453	
3572	1.454	34.681	1.182	27.777	37.025	45.859	43.618	3.249	3523	

MISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	SIG 02	O2 SAT	SIG 03	PC4	NO1	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
29	24.007	35.173	5.07	105.6	1.5	0.16	0.1	0.10		24.001	23.774	32.107	40.084	29
49	23.893	35.172	5.14	107.0	0.8	0.16	0.1	0.10		23.983	23.778	32.112	40.090	48
96	23.542	35.176	5.24	104.1	0.6	0.15	0.1	0.10		23.522	23.917	32.263	40.253	96
187	22.635	35.289	4.43	86.1	1.8		2.1	0.12		20.200	24.763	33.206	41.285	187
290	14.115	34.462	4.47	76.9	5.9	0.72	8.4	0.11		14.193	25.737	34.393	42.672	290
393	9.727	34.120	4.33	67.7	22.0	1.16	19.5	0.10		9.682	26.318	35.155	43.604	394
489	7.213	34.062	2.73	40.3	47.0	2.14	10.1	0.10		7.166	26.657	35.607	44.162	491
594	5.722	34.132	1.27	18.1	73.7	2.80	18.4	0.10		5.671	26.908	35.928	44.549	597
697	5.073	34.304	0.61	8.6	91.9	1.10	42.1	0.10		5.016	27.122	36.172	44.820	701
802	4.677	34.418	0.72	10.0	99.7		42.9	0.10		4.613	27.258	36.326	44.992	807
910	4.184	34.466	0.83	11.5	105.5		43.7	0.11		4.112	27.328	36.411	45.091	916
1016	4.030	34.502	0.90	12.3	112.3		44.2	0.11		3.952	27.395	36.496	45.192	1023
1263	3.441	34.541	1.17	15.8	126.9		44.1	0.10		3.347	27.486	36.618	45.343	1272
1524	2.865	34.575	1.47	19.6	139.5		42.4	0.12		2.755	27.568	36.731	45.485	1537
1773	2.422	34.603	1.83	24.1	149.0	2.94	41.5	0.10		2.297	27.629	36.816	45.594	1789
1992	2.113	34.624	2.13	27.8	155.4	2.86	40.9	0.10		1.993	27.671	36.875	45.667	2011
2453	1.753	34.647	2.19	30.9	164.8		39.4	0.12		1.578	27.721	36.947	45.761	2490
3522	1.452	34.683	3.19	40.8	158.9		37.4	0.13		1.179	27.778	37.026	45.860	3570

# MARATHON 2 STA. 3



R/V THOMAS WASHINGTON MARATHON LEG II STATION 4

LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
22 19 ON	156 48 OW	5 6/84	724	1905	90	9	20 6	21 1	1019 6

## CTD DATA

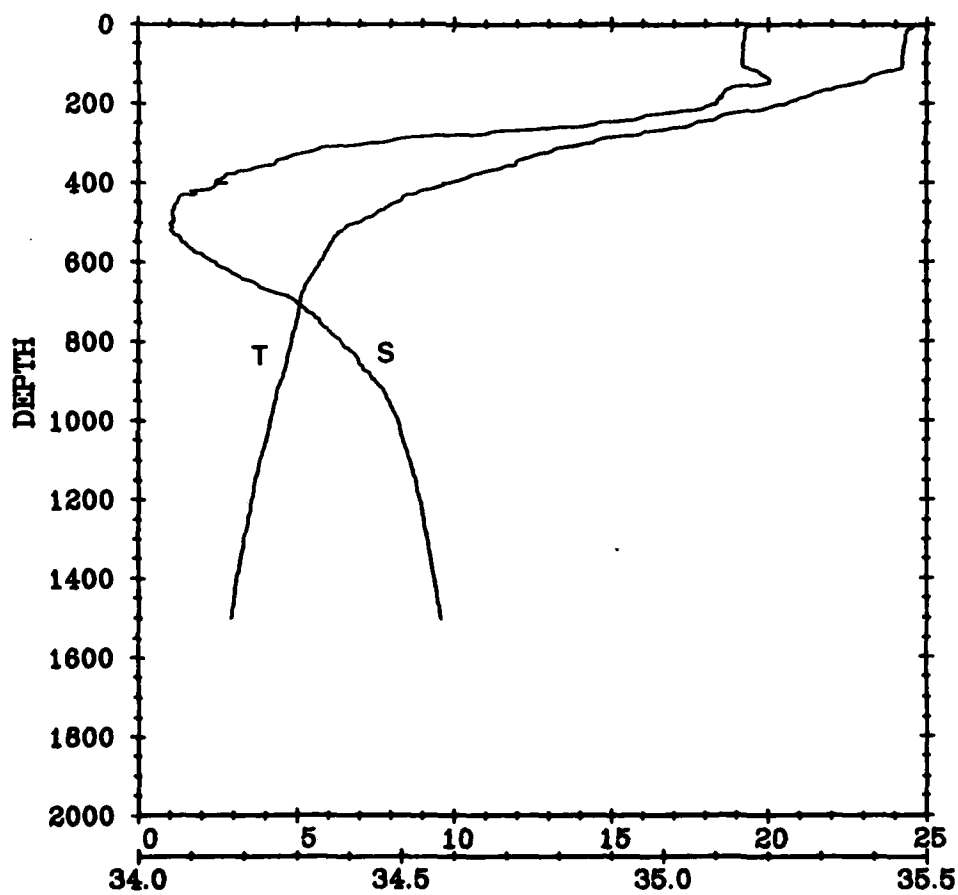
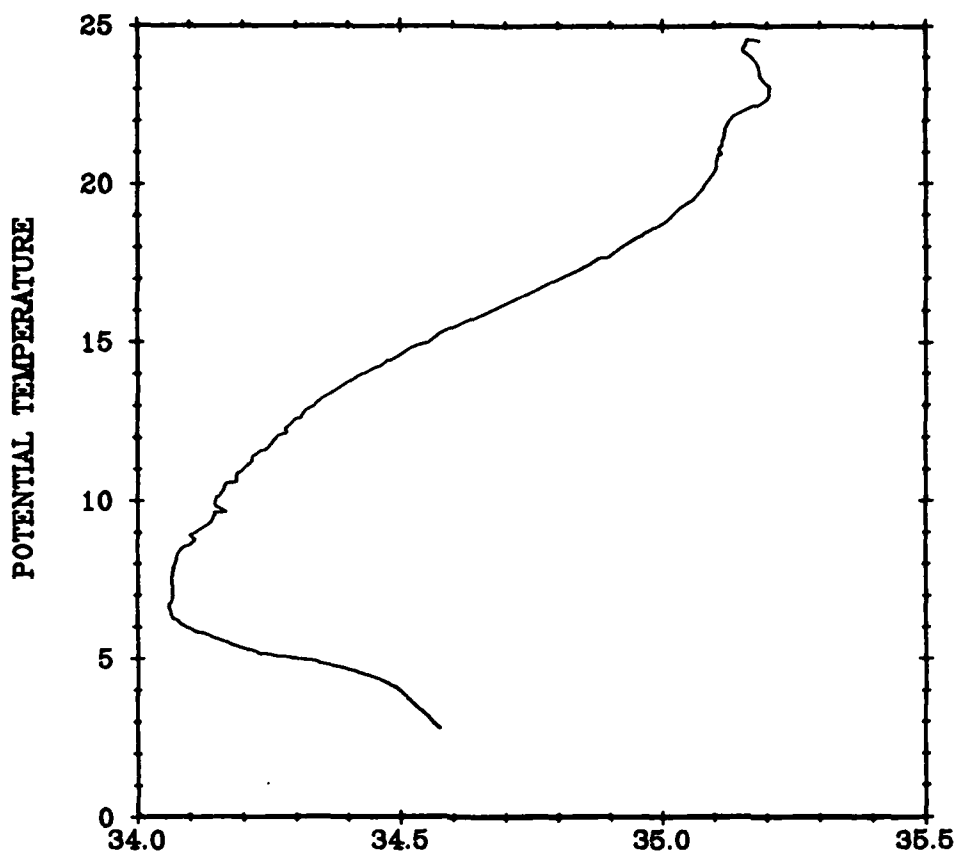
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM/TON		M
0	24.529	35.167	24.529	23.612	31.931	39.895	427.095	0.000	0
20	24.374	35.156	24.370	23.651	31.975	39.943	424.174	0.085	19
40	24.319	35.155	24.310	23.668	31.994	39.963	423.195	0.170	39
60	24.277	35.154	24.264	23.681	32.009	39.979	422.887	0.255	59
80	24.260	35.152	24.243	23.686	32.013	39.985	423.163	0.339	79
100	24.239	35.153	24.219	23.694	32.022	39.994	423.404	0.424	99
120	22.711	35.187	22.681	24.169	32.538	40.549	390.133	0.625	149
140	20.527	35.098	20.489	24.708	33.142	41.213	330.219	0.802	199
160	17.758	34.887	17.725	25.254	33.777	41.932	279.357	0.955	249
180	14.274	34.457	14.230	25.720	34.370	42.645	235.195	1.083	299
200	11.997	34.261	11.941	26.027	34.768	43.127	206.118	1.194	348
220	9.957	34.152	9.911	26.305	35.132	43.571	179.441	1.290	398
240	8.204	34.074	8.158	26.523	35.428	43.940	158.248	1.374	447
260	6.987	34.064	6.940	26.690	35.651	44.215	142.396	1.450	497
280	5.789	34.137	5.737	26.904	35.921	44.538	121.895	1.582	546
300	5.093	34.291	5.036	27.109	36.158	44.806	102.176	1.694	596
320	4.818	34.378	4.754	27.210	36.272	44.932	93.563	1.792	645
340	4.511	34.444	4.440	27.297	36.374	45.048	86.281	1.882	694
360	4.172	34.490	4.095	27.371	36.465	45.154	79.660	1.965	743
380	3.860	34.513	3.777	27.422	36.531	45.236	75.040	2.043	792
400	3.580	34.531	3.491	27.464	36.589	45.307	71.139	2.116	841
420	3.352	34.547	3.257	27.500	36.636	45.366	67.965	2.185	890
440	3.125	34.560	3.024	27.532	36.680	45.421	64.977	2.252	939
460	2.942	34.572	2.835	27.558	36.717	45.467	62.543	2.316	988
480	2.901	34.575	2.793	27.565	36.725	45.478	61.929	2.325	1037

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
52	24.292	35.152	4.88	102.1	1.8	0.14	0.1	0.00	3.21	24.281	23.675	32.001	39.971	52
102	24.252	35.151	4.88	102.0	1.0	0.13	0.1	0.00		24.230	23.689	32.016	39.998	102
152	23.156	35.200	4.81	99.6	0.7	0.15	0.1	0.10		23.125	24.251	32.407	40.407	150
202	20.997	35.102	4.39	86.4	1.4	0.29	1.7	0.03	3.70	20.959	24.611	33.034	41.095	201
252	18.209	34.938	4.18	81.9	2.5		3.6	0.02		18.165	25.185	33.693	41.934	253
302	14.505	34.472	4.15	75.4	7.3	0.72	8.7	0.01		14.460	25.682	34.124	42.591	304
379	10.612	34.171	4.09	65.2	19.0	1.27	17.3	0.00		10.566	26.207	35.006	43.419	380
454	8.281	34.075	3.41	51.6	34.7	1.78	25.1	0.00		8.234	26.513	35.413	43.922	456
529	6.482	34.063	2.11	30.6	58.2	2.43	34.0	0.00	1.40	6.434	26.757	35.741	44.328	531
603	5.758	34.141	1.18	16.8	74.1	2.80	38.9	0.00	0.34	5.756	26.910	35.929	44.548	606
704	5.071	34.299	0.55	7.7	91.9		42.6	0.00	0.15	5.013	27.118	36.163	44.817	708
754	4.938	34.344	0.52	7.3	95.3		43.0	0.04	0.01	4.876	27.169	36.226	44.880	758
804	4.806	34.384	0.55	7.7	96.0		43.2	0.05		4.741	27.216	36.279	44.939	809
1005	4.150	34.493	0.88	12.1	109.6		43.6	0.01		4.072	27.375	36.470	45.161	1012
1254	3.435	34.542	1.15	15.5	125.4		43.3	0.02		3.342	27.488	36.620	45.345	1263
1502	2.893	34.573	1.53	20.4	139.5	2.99	42.7	0.00		2.785	27.564	36.725	45.478	1514



# MARATHON 2 STA. 4

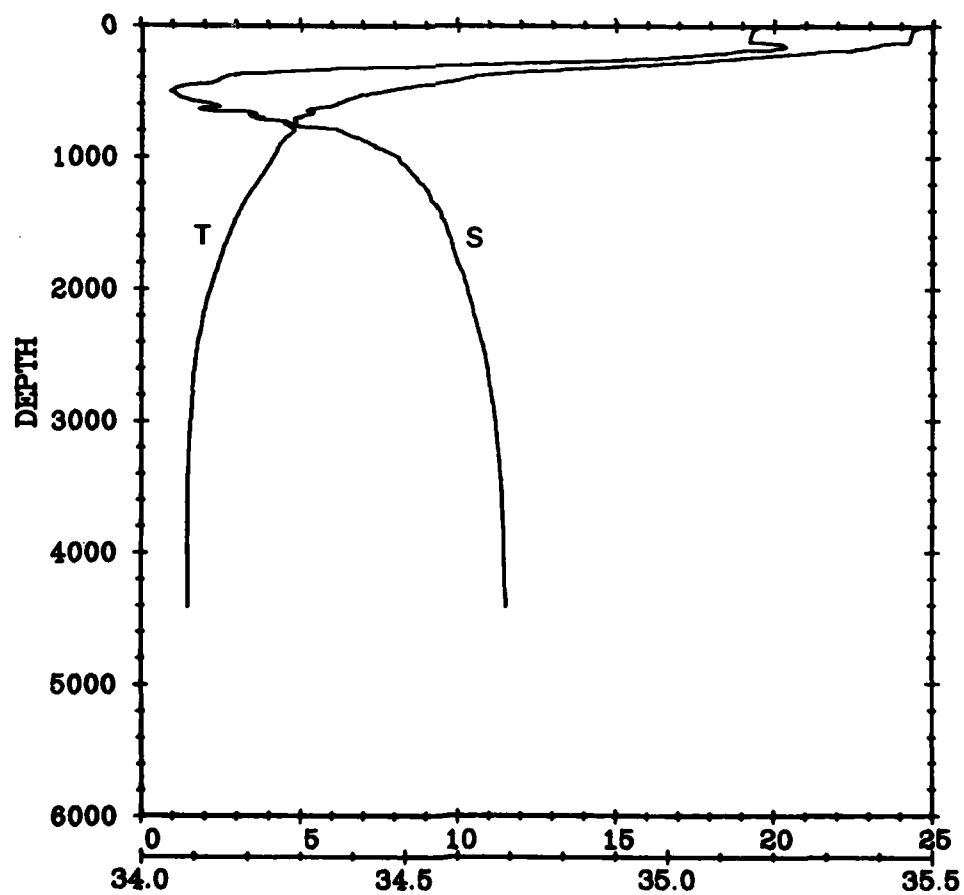
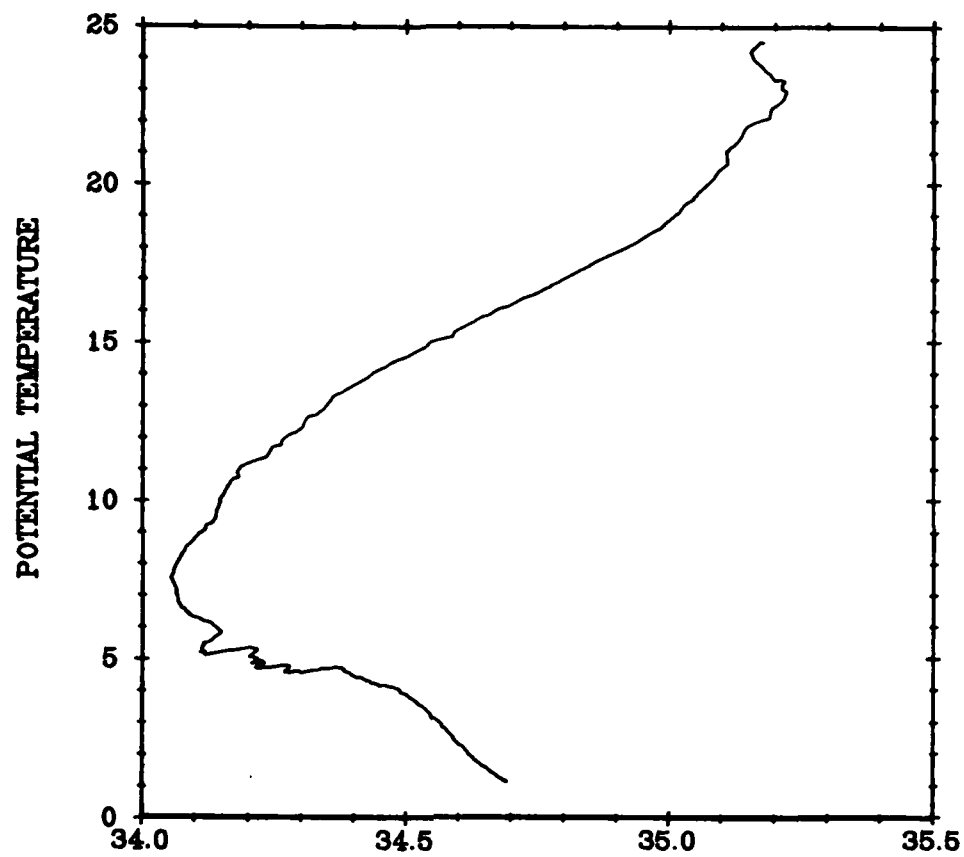


LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
22 30 5N	156 26 0W	5/ 6/84	1330	4419	100	7	25.2	21.1	1019.6

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	24.504	35.178	24.504	23.628	31.948	39.912	425.584	0.000	0
10	24.451	35.167	24.447	23.616	31.958	39.924	425.582	0.085	10
20	24.396	35.159	24.327	23.666	31.991	39.960	423.591	0.170	20
30	24.299	35.156	24.286	23.676	32.002	39.972	423.470	0.255	30
40	24.283	35.155	24.266	23.681	32.008	39.978	423.803	0.339	40
50	24.266	35.153	24.245	23.686	32.013	39.985	424.178	0.424	50
60	23.185	35.213	23.154	24.052	32.438	40.405	391.210	0.528	60
70	21.339	35.126	21.299	24.509	32.919	40.969	349.337	0.813	70
80	18.699	34.979	18.655	25.094	33.596	41.712	294.596	0.974	80
90	15.919	34.659	15.872	25.515	34.155	42.321	255.410	1.122	90
100	12.303	34.291	12.257	25.990	34.719	43.065	219.817	1.228	100
110	10.304	34.154	10.257	26.248	35.060	43.485	185.144	1.327	110
120	9.258	34.112	9.209	26.422	35.288	43.764	158.677	1.415	120
130	7.696	34.057	7.646	26.585	35.513	44.047	132.759	1.496	130
140	6.139	34.129	6.086	26.854	35.854	44.456	107.281	1.566	140
150	4.928	34.213	4.872	27.066	36.125	44.781	116.523	1.752	150
160	4.792	34.368	4.718	27.206	36.270	44.932	94.258	1.951	160
170	4.037	34.431	4.267	27.306	36.391	45.073	85.118	1.943	170
180	4.101	34.482	4.054	27.369	36.465	45.156	79.754	2.025	180
190	3.879	34.575	3.796	27.413	36.522	45.225	75.861	2.103	190
200	3.619	34.526	3.530	27.457	36.579	45.295	71.977	2.177	200
210	3.341	34.545	3.246	27.499	36.616	45.366	67.981	2.247	210
220	3.107	34.561	3.006	27.534	36.634	45.426	64.689	2.311	220
230	2.898	34.573	2.791	27.563	36.724	45.477	61.942	2.376	230
240	2.744	34.582	2.631	27.584	36.754	45.514	60.028	2.437	240
250	2.569	34.599	2.450	27.606	36.785	45.554	57.963	2.496	250
260	2.446	34.597	2.320	27.623	36.809	45.585	56.407	2.554	260
270	2.306	34.599	2.173	27.645	36.839	45.622	54.311	2.609	270
280	2.181	34.616	2.042	27.661	36.862	45.652	52.722	2.662	280
290	2.051	34.622	1.905	27.676	36.885	45.682	51.105	2.714	290
300	1.943	34.629	1.790	27.691	36.906	45.708	49.648	2.765	300
310	1.885	34.635	1.725	27.701	36.919	45.725	48.862	2.814	310
320	1.796	34.642	1.628	27.714	36.937	45.748	47.592	2.862	320
330	1.739	34.649	1.563	27.724	36.951	45.766	46.672	2.909	330
340	1.685	34.655	1.502	27.733	36.964	45.781	45.878	2.956	340
350	1.644	34.657	1.452	27.738	36.972	45.792	45.512	3.001	350
360	1.615	34.661	1.416	27.744	36.979	45.801	45.160	3.047	360
370	1.589	34.665	1.379	27.750	36.987	45.811	44.795	3.092	370
380	1.553	34.669	1.335	27.756	36.996	45.822	44.322	3.136	380
390	1.524	34.671	1.297	27.761	37.002	45.830	44.061	3.180	390
400	1.494	34.674	1.258	27.766	37.010	45.840	43.701	3.224	400
410	1.481	34.676	1.235	27.769	37.014	45.845	43.646	3.268	410
420	1.465	34.679	1.210	27.773	37.020	45.852	43.468	3.311	420
430	1.454	34.681	1.189	27.776	37.024	45.857	43.429	3.355	430
440	1.449	34.683	1.174	27.779	37.027	45.862	43.473	3.398	440
450	1.445	34.684	1.160	27.781	37.030	45.865	43.601	3.442	450
460	1.448	34.685	1.152	27.782	37.032	45.867	43.833	3.486	460
470	1.449	34.686	1.142	27.783	37.034	45.870	44.033	3.530	470
480	1.453	34.686	1.135	27.784	37.034	45.871	44.350	3.574	480
490	1.459	34.687	1.130	27.785	37.036	45.872	44.629	3.618	490
500	1.462	34.688	1.122	27.786	37.038	45.875	44.859	3.663	500
510	1.464	34.689	1.113	27.788	37.040	45.877	45.073	3.708	510
520	1.467	34.690	1.104	27.789	37.041	45.879	45.302	3.753	520
530	1.468	34.690	1.095	27.790	37.043	45.881	45.542	3.794	530

NISKIN BOTTLE DATA		DIS O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUSIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C												
10	24.465	35.174	4.89	102.6	1.1	0.15	0.0	0.00	24.463	23.617	31.958	39.924	10
55	24.289	35.157	4.94	103.3	0.7	0.13	0.0	0.00	24.277	23.679	32.006	39.976	55
105	24.266	35.155	4.90	102.4	0.5	0.12	0.0	0.00	24.244	23.688	32.015	39.986	105
155	23.281	35.215	4.81	99.3	0.5	0.11	0.0	0.07	23.251	24.026	32.379	40.375	155
206	21.131	35.114	4.45	88.0	0.9	0.24	1.4	0.03	21.093	24.557	32.972	41.027	206
305	15.061	34.550	4.41	77.4	6.0	0.63	7.5	0.21	15.014	25.623	34.244	42.490	305
406	10.200	34.152	4.01	63.3	20.9	1.33	18.5	0.00	10.132	26.264	35.080	43.510	407
507	7.454	34.056	3.07	45.6	42.3	2.00	28.2	0.00	7.404	26.619	35.558	44.102	509
607	6.127	34.134	1.35	19.4	56.6	2.66	37.3	0.00	6.073	26.859	35.860	44.462	610
706	4.873	34.208	0.75	10.5	92.1	2.96	42.0	0.00	4.816	27.068	36.130	44.789	710
806	4.698	34.385	0.71	9.9	99.1	3.06	42.9	0.00	4.633	27.229	36.297	44.962	810
907	4.277	34.440	0.91	12.5	107.1	3.35	43.0	0.00	4.206	27.319	36.408	45.093	912
1007	4.070	34.487	1.02	14.0	112.2		43.1	0.00	3.992	27.379	36.478	45.172	1013
1257	3.447	34.541	1.20	16.2	125.0		43.1	0.00	3.354	27.486	36.617	45.342	1266
1506	2.876	34.579	1.48	19.7	136.9		42.4	0.01	2.748	27.570	36.732	45.485	1518
1755	2.474	34.595	1.80	23.7	147.9		41.7	0.00	2.350	27.619	36.803	45.578	1771
2005	2.151	34.616	2.01	26.3	155.3		40.9	0.01	2.010	27.663	36.866	45.657	2024
2504	1.712	34.651	2.60	33.6	164.5	2.70	39.6	0.00	1.534	27.728	36.956	45.772	2532
3002	1.528	34.672	2.95	37.9	166.3	2.62	38.6	0.00	1.306	27.761	37.002	45.829	3039
3500	1.451	34.682	3.23	41.3	157.9		37.5	0.01	1.180	27.778	37.025	45.859	3548
3998	1.455	34.686	3.47	44.3	157.7	2.45	36.9	0.00	1.130	27.794	37.035	45.871	4057
4420	1.468	34.689	3.50	44.7	153.0		36.6	0.02	1.094	27.789	37.042	45.880	4490

# MARATHON 2 STA. 5



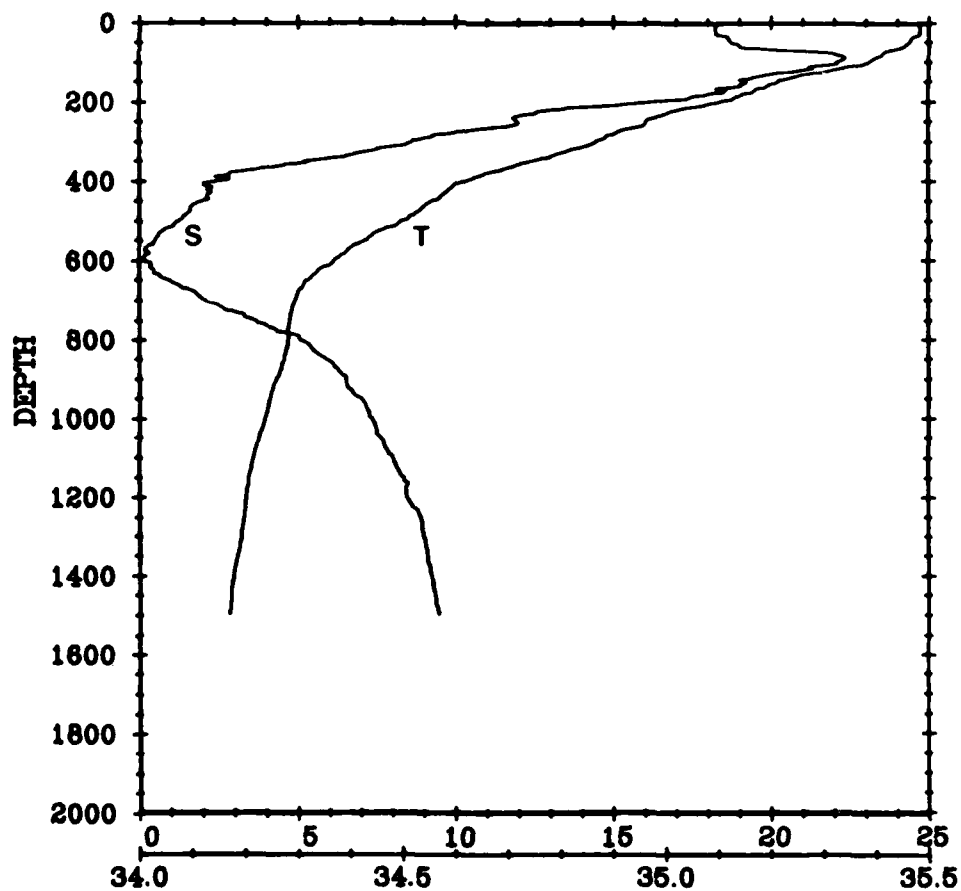
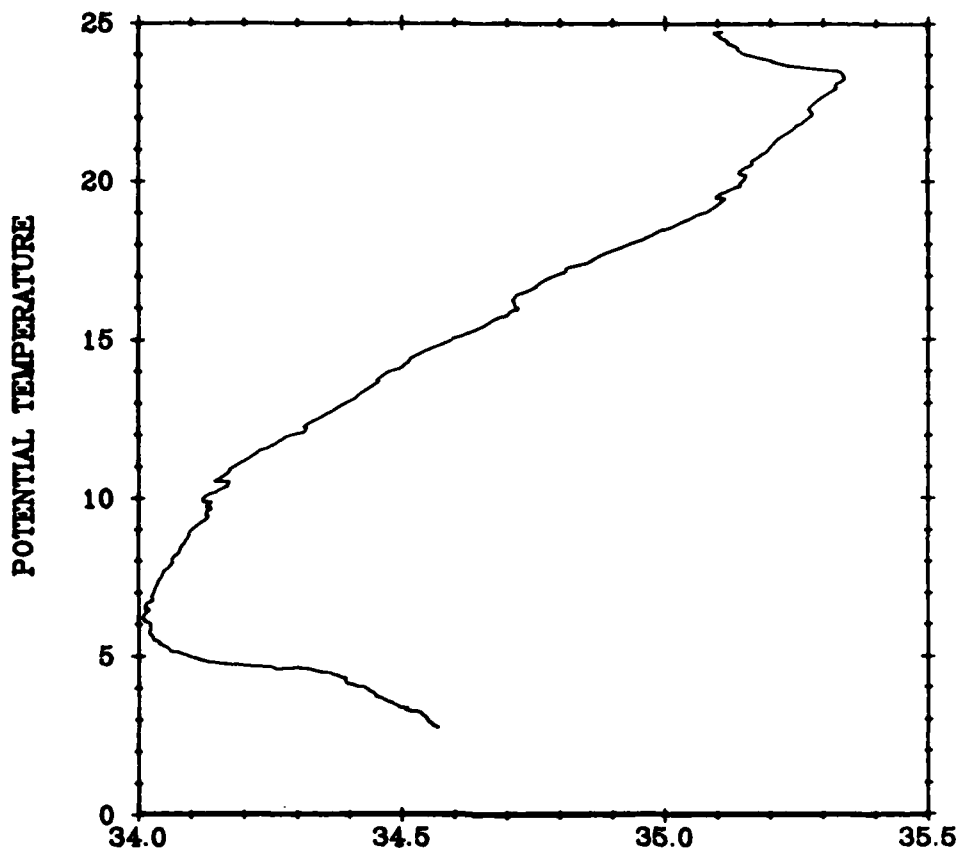
R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 6

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	SARUM
23 2 5N	156 19 1W	5/ 6/84	1942	M	DIR	KT	DEG C	DEG C	MB
					150	13	25.7	23.3	1019.0

CTD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C			DEG C			CL TON			M
1	24.705	35.099		24.705	23.507	31.823	19.783	437.262	0.700	0
20	24.687	35.095		24.683	23.511	31.827	19.788	437.554	0.687	19
40	24.660	35.115		24.651	23.536	31.918	19.884	433.311	0.714	39
60	24.612	35.154		24.099	23.710	32.251	43.116	419.294	0.259	59
80	23.503	35.101		23.486	24.023	32.169	40.358	191.177	0.340	79
100	22.992	35.122		22.972	24.188	32.547	40.549	174.264	0.427	99
150	20.130	35.149		20.142	24.814	33.277	41.157	114.116	0.590	149
200	19.160	34.978		18.325	25.176	33.678	41.914	285.222	0.740	199
250	16.090	34.715		16.040	25.520	34.103	42.313	253.419	0.875	249
300	14.490	34.526		14.446	25.727	34.369	42.635	234.610	0.997	299
350	12.448	34.334		12.401	25.945	34.718	43.059	209.455	1.118	348
400	10.351	34.152		10.304	26.238	35.048	43.472	186.992	1.207	398
450	9.367	34.123		9.317	26.391	35.233	43.697	172.830	1.297	447
500	8.403	34.078		8.351	26.497	35.393	43.897	161.821	1.380	497
600	6.231	34.013		6.178	26.750	35.748	44.347	134.902	1.510	596
700	4.923	34.119		4.867	26.942	36.052	44.711	111.419	1.655	695
800	4.649	34.100		4.526	27.163	36.232	44.899	99.153	1.761	795
900	4.154	34.189		4.284	27.270	36.156	45.238	88.414	1.854	894
1000	3.970	34.439		3.895	27.351	36.456	45.156	80.886	1.919	993
1100	3.419	34.477		3.528	27.418	36.541	45.259	74.706	2.016	1092
1200	3.175	34.508		3.288	27.465	36.601	45.320	70.400	2.089	1190
1300	3.227	34.539		3.133	27.505	36.648	45.384	67.045	2.158	1289
1400	2.984	34.553		2.885	27.539	36.695	45.443	63.815	2.223	1388
1500	2.845	34.567		2.739	27.563	36.727	45.482	61.162	2.286	1487
1508	2.826	34.569		2.719	27.566	36.731	45.487	61.426	2.291	1495

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 02	O2 SAT	SIG3	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
10	24.779	35.099			1.3	0.15	0.0	0.00		24.777	20.485	31.799	19.787	10
53	24.204	35.129	4.88	101.9	0.5	0.12	0.0	0.00		24.193	23.583	32.012	19.985	53
104	22.961	35.129	5.03	102.9	0.6	0.09	0.0	0.00		22.940	24.202	32.563	40.565	104
139	20.912	35.181	4.90	95.5	0.8	0.14	0.0	0.03		20.895	24.564	33.185	42.144	139
172	14.598	35.126	4.83	92.8	1.5		0.8	0.08		19.556	24.975	33.437	41.535	172
205	18.195	34.949	4.92	92.0	1.8	0.23	1.5	0.03		18.150	25.194	33.702	41.843	205
255	15.967	34.714	4.94	88.3	1.7	0.40	4.1	0.01		15.925	25.545	34.132	42.346	255
306	14.344	34.492	5.28	87.3	5.7	0.56	6.6	0.01		13.999	25.795	34.454	42.706	306
407	10.382	34.170	4.64	73.6	17.1	1.11	15.7	0.00		10.333	26.247	35.055	43.478	407
506	9.220	34.073	4.24	61.0	32.8		23.0	0.00		9.167	26.521	35.425	43.477	506
603	5.978	34.021	2.88	12.6	64.2		34.4	0.00		5.825	26.801	35.815	44.431	603
704	4.953	34.137	1.25	14.7	99.5		40.8	0.00		4.797	27.114	36.088	44.739	704
705	4.954	34.140	1.28	15.1	89.5		40.7	0.00		4.797	27.115	36.088	44.741	705
803	4.124	34.107	0.55	7.7	99.1		42.9	0.01		4.640	27.167	36.235	44.901	803
901	4.325	34.093	0.71	9.8	108.9	3.08	43.3	0.01		4.255	27.277	36.364	45.047	901
1003	3.943	34.440	0.87	11.9	115.1	3.05	43.2	0.00		3.867	27.354	36.460	45.162	1003
1203	3.297	34.535	1.29	17.4	128.2		42.6	0.01		3.194	27.496	36.535	45.368	1203
1488	2.845	34.567	1.37	20.9	139.3	2.92	42.1	0.00		2.719	27.563	36.727	45.482	1488
1489	2.842	34.569	1.55	20.6	139.4		42.0	0.01		2.716	27.565	36.729	45.484	1501

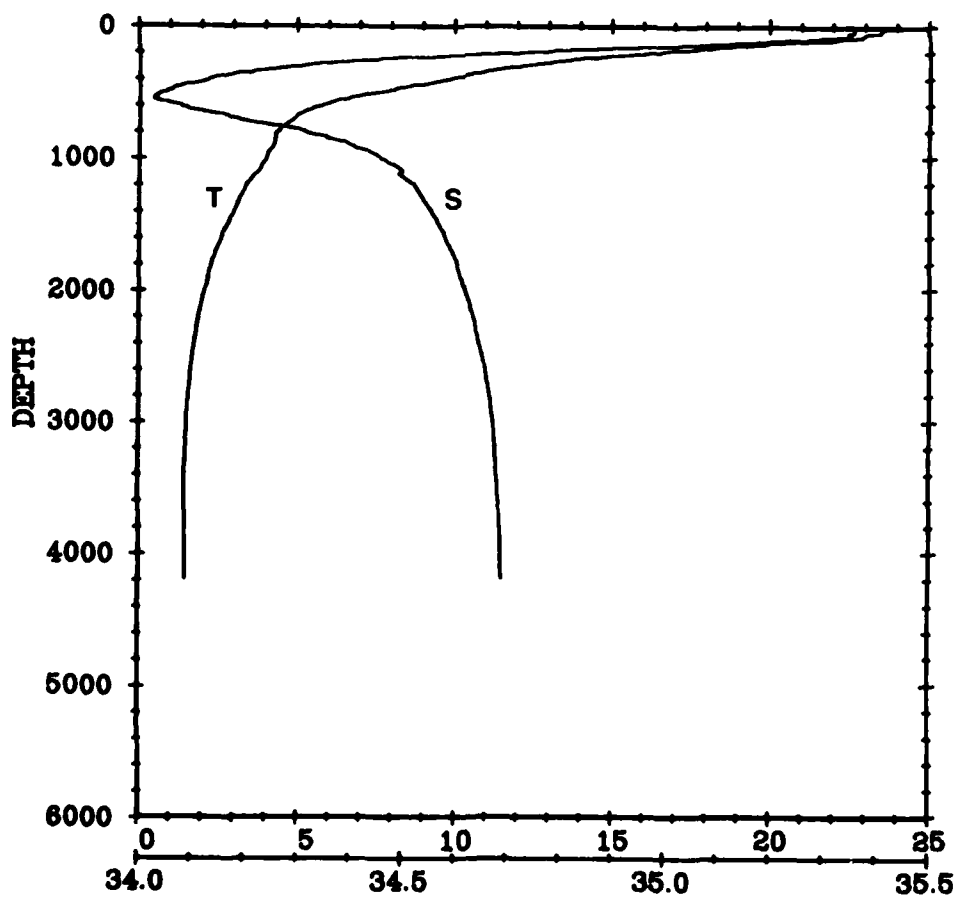
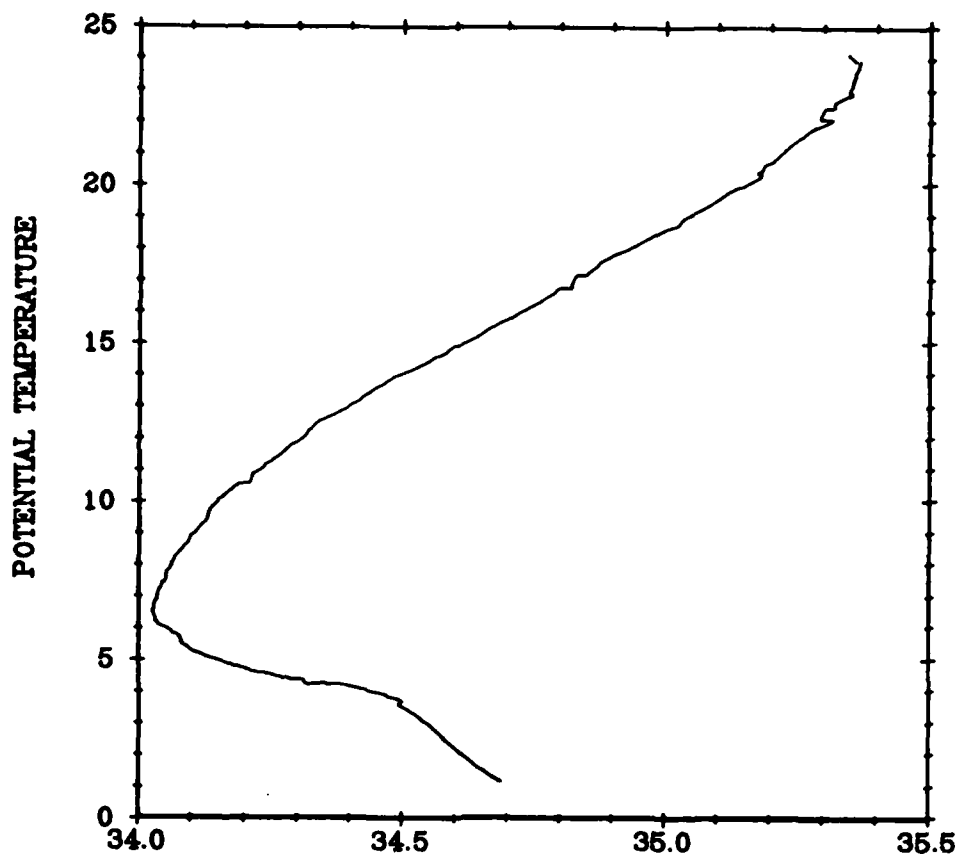
# MARATHON 2 STA. 6



LATITUDE LONGITUDE MO DY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB SARCH  
21 23 4N 125 15 7W 5 1 84 1 0 41 34 20 15 25 7 22 7 1019 1

TIME DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DEG C	DB	DEG C		DEG C						M
21 23 4N	1019.1	23.491	35.358	23.491	20.446	32.281	40.249	39.516	0.000	0
21 23 5N	1019.2	23.492	35.359	23.492	20.447	32.282	40.250	39.517	0.001	1
21 24 0N	1019.3	23.493	35.360	23.493	20.448	32.283	40.251	39.518	0.002	2
21 24 1N	1019.4	23.494	35.361	23.494	20.449	32.284	40.252	39.519	0.003	3
21 24 2N	1019.5	23.495	35.362	23.495	20.450	32.285	40.253	39.520	0.004	4
21 24 3N	1019.6	23.496	35.363	23.496	20.451	32.286	40.254	39.521	0.005	5
21 24 4N	1019.7	23.497	35.364	23.497	20.452	32.287	40.255	39.522	0.006	6
21 24 5N	1019.8	23.498	35.365	23.498	20.453	32.288	40.256	39.523	0.007	7
21 25 0N	1019.9	23.499	35.366	23.499	20.454	32.289	40.257	39.524	0.008	8
21 25 1N	1020.0	23.500	35.367	23.500	20.455	32.290	40.258	39.525	0.009	9
21 25 2N	1020.1	23.501	35.368	23.501	20.456	32.291	40.259	39.526	0.010	10
21 25 3N	1020.2	23.502	35.369	23.502	20.457	32.292	40.260	39.527	0.011	11
21 25 4N	1020.3	23.503	35.370	23.503	20.458	32.293	40.261	39.528	0.012	12
21 25 5N	1020.4	23.504	35.371	23.504	20.459	32.294	40.262	39.529	0.013	13
21 26 0N	1020.5	23.505	35.372	23.505	20.460	32.295	40.263	39.530	0.014	14
21 26 1N	1020.6	23.506	35.373	23.506	20.461	32.296	40.264	39.531	0.015	15
21 26 2N	1020.7	23.507	35.374	23.507	20.462	32.297	40.265	39.532	0.016	16
21 26 3N	1020.8	23.508	35.375	23.508	20.463	32.298	40.266	39.533	0.017	17
21 26 4N	1020.9	23.509	35.376	23.509	20.464	32.299	40.267	39.534	0.018	18
21 26 5N	1021.0	23.510	35.377	23.510	20.465	32.300	40.268	39.535	0.019	19
21 27 0N	1021.1	23.511	35.378	23.511	20.466	32.301	40.269	39.536	0.020	20
21 27 1N	1021.2	23.512	35.379	23.512	20.467	32.302	40.270	39.537	0.021	21
21 27 2N	1021.3	23.513	35.380	23.513	20.468	32.303	40.271	39.538	0.022	22
21 27 3N	1021.4	23.514	35.381	23.514	20.469	32.304	40.272	39.539	0.023	23
21 27 4N	1021.5	23.515	35.382	23.515	20.470	32.305	40.273	39.540	0.024	24
21 27 5N	1021.6	23.516	35.383	23.516	20.471	32.306	40.274	39.541	0.025	25
21 28 0N	1021.7	23.517	35.384	23.517	20.472	32.307	40.275	39.542	0.026	26
21 28 1N	1021.8	23.518	35.385	23.518	20.473	32.308	40.276	39.543	0.027	27
21 28 2N	1021.9	23.519	35.386	23.519	20.474	32.309	40.277	39.544	0.028	28
21 28 3N	1022.0	23.520	35.387	23.520	20.475	32.310	40.278	39.545	0.029	29
21 28 4N	1022.1	23.521	35.388	23.521	20.476	32.311	40.279	39.546	0.030	30
21 28 5N	1022.2	23.522	35.389	23.522	20.477	32.312	40.280	39.547	0.031	31
21 29 0N	1022.3	23.523	35.390	23.523	20.478	32.313	40.281	39.548	0.032	32
21 29 1N	1022.4	23.524	35.391	23.524	20.479	32.314	40.282	39.549	0.033	33
21 29 2N	1022.5	23.525	35.392	23.525	20.480	32.315	40.283	39.550	0.034	34
21 29 3N	1022.6	23.526	35.393	23.526	20.481	32.316	40.284	39.551	0.035	35
21 29 4N	1022.7	23.527	35.394	23.527	20.482	32.317	40.285	39.552	0.036	36
21 29 5N	1022.8	23.528	35.395	23.528	20.483	32.318	40.286	39.553	0.037	37
21 30 0N	1022.9	23.529	35.396	23.529	20.484	32.319	40.287	39.554	0.038	38
21 30 1N	1023.0	23.530	35.397	23.530	20.485	32.320	40.288	39.555	0.039	39
21 30 2N	1023.1	23.531	35.398	23.531	20.486	32.321	40.289	39.556	0.040	40
21 30 3N	1023.2	23.532	35.399	23.532	20.487	32.322	40.290	39.557	0.041	41
21 30 4N	1023.3	23.533	35.400	23.533	20.488	32.323	40.291	39.558	0.042	42
21 30 5N	1023.4	23.534	35.401	23.534	20.489	32.324	40.292	39.559	0.043	43
21 31 0N	1023.5	23.535	35.402	23.535	20.490	32.325	40.293	39.560	0.044	44
21 31 1N	1023.6	23.536	35.403	23.536	20.491	32.326	40.294	39.561	0.045	45
21 31 2N	1023.7	23.537	35.404	23.537	20.492	32.327	40.295	39.562	0.046	46
21 31 3N	1023.8	23.538	35.405	23.538	20.493	32.328	40.296	39.563	0.047	47
21 31 4N	1023.9	23.539	35.406	23.539	20.494	32.329	40.297	39.564	0.048	48
21 31 5N	1024.0	23.540	35.407	23.540	20.495	32.330	40.298	39.565	0.049	49
21 32 0N	1024.1	23.541	35.408	23.541	20.496	32.331	40.299	39.566	0.050	50
21 32 1N	1024.2	23.542	35.409	23.542	20.497	32.332	40.300	39.567	0.051	51
21 32 2N	1024.3	23.543	35.410	23.543	20.498	32.333	40.301	39.568	0.052	52
21 32 3N	1024.4	23.544	35.411	23.544	20.499	32.334	40.302	39.569	0.053	53
21 32 4N	1024.5	23.545	35.412	23.545	20.500	32.335	40.303	39.570	0.054	54
21 32 5N	1024.6	23.546	35.413	23.546	20.501	32.336	40.304	39.571	0.055	55
21 33 0N	1024.7	23.547	35.414	23.547	20.502	32.337	40.305	39.572	0.056	56
21 33 1N	1024.8	23.548	35.415	23.548	20.503	32.338	40.306	39.573	0.057	57
21 33 2N	1024.9	23.549	35.416	23.549	20.504	32.339	40.307	39.574	0.058	58
21 33 3N	1025.0	23.550	35.417	23.550	20.505	32.340	40.308	39.575	0.059	59
21 33 4N	1025.1	23.551	35.418	23.551	20.506	32.341	40.309	39.576	0.060	60
21 33 5N	1025.2	23.552	35.419	23.552	20.507	32.342	40.310	39.577	0.061	61
21 34 0N	1025.3	23.553	35.420	23.553	20.508	32.343	40.311	39.578	0.062	62
21 34 1N	1025.4	23.554	35.421	23.554	20.509	32.344	40.312	39.579	0.063	63
21 34 2N	1025.5	23.555	35.422	23.555	20.510	32.345	40.313	39.580	0.064	64
21 34 3N	1025.6	23.556	35.423	23.556	20.511	32.346	40.314	39.581	0.065	65
21 34 4N	1025.7	23.557	35.424	23.557	20.512	32.347	40.315	39.582	0.066	66
21 34 5N	1025.8	23.558	35.425	23.558	20.513	32.348	40.316	39.583	0.067	67
21 35 0N	1025.9	23.559	35.426	23.559	20.514	32.349	40.317	39.584	0.068	68
21 35 1N	1026.0	23.560	35.427	23.560	20.515	32.350	40.318	39.585	0.069	69
21 35 2N	1026.1	23.561	35.428	23.561	20.516	32.351	40.319	39.586	0.070	70
21 35 3N	1026.2	23.562	35.429	23.562	20.517	32.352	40.320	39.587	0.071	71
21 35 4N	1026.3	23.563	35.430	23.563	20.518	32.353	40.321	39.588	0.072	72
21 35 5N	1026.4	23.564	35.431	23.564	20.519	32.354	40.322	39.589	0.073	73
21 36 0N	1026.5	23.565	35.432	23.565	20.520	32.355	40.323	39.590	0.074	74
21 36 1N	1026.6	23.566	35.433	23.566	20.521	32.356	40.324	39.591	0.075	75
21 36 2N	1026.7	23.567	35.434	23.567	20.522	32.357	40.325	39.592	0.076	76
21 36 3N	1026.8	23.568	35.435	23.568	20.523	32.358	40.326	39.593	0.077	77
21 36 4N	1026.9	23.569	35.436	23.569	20.524	32.359	40.327	39.594	0.078	78
21 36 5N	1027.0	23.570	35.437	23.570	20.525	32.360	40.328	39.595	0.079	79
21 37 0N	1027.1	23.571	35.438	23.571	20.526	32.361	40.329	39.596	0.080	80
21 37 1N	1027.2	23.572	35.439	23.572	20.527	32.362	40.330	39.597	0.081	81
21 37 2N	1027.3	23.573	35.440	23.573	20.528	32.363	40.331	39.598	0.082	82
21 37 3N	1027.4	23.574	35.441	23.574	20.529	32.364	40.332	39.599	0.083	83
21 37 4N	1027.5	23.575	35.442	23.575	20.530	32.365	40.333	39.600	0.084	84
21 37 5N	1027.6	23.576	35.443	23.576	20.531	32.366	40.334	39.601	0.085	85
21 38 0N	1027.7	23.577	35.444	23.577	20.532	32.367	40.335	39.602	0.086	86
21 38 1N	1027.8	23.578	35.445	23.578	20.533	32.368	40.336	39.603	0.087	87
21 38 2N	1027.9	23.579	35.446	23.579	20.534	32.369	40.337	39.604	0.088	88
21 38 3N	1028.0	23.580	35.447	23.580	20.535	32.370	40.338	39.605	0.089	89
21 38 4N	1028.1	23.581	35.448	23.581	20.536	32.371	40.339	39.606	0.090	90
21 38 5N	1028.2	23.582	35.449	23.582	20.537	32.372	40.340	39.607	0.091	91
21 39 0N	1028.3	23.583	35.450	23.583	20.538	32.373	40.341	39.608	0.092	92
21 39 1N	1028.4	23.584	35.451	23.584	20.539	32.374	40.342	39.609	0.093	93
21 39 2N	1028.5	23.585	35.452	23.585	20.540	32.375	40.343	39.610	0.094	94
21 39 3N	1028.6	23.586	35.453	23.586	20.541	32.376	40.344	39.611	0.095	95
21 39 4N	1028.7	23.587	35.454	23.587	20.542	32.377	40.345	39.612	0.096	96
21 39 5N	1028.8	23.588	35.455	23.588	20.543	32.378	40.346	39.613	0.09	

# MARATHON 2 STA. 7



R. V. THOMAS WASHINGTON MARATHON LEG 11 STATION 9

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MM
23 45 IN	155 39 4W	5/7/84	019	4140	40	11	28.1	21.7	102.2

## STD DATA

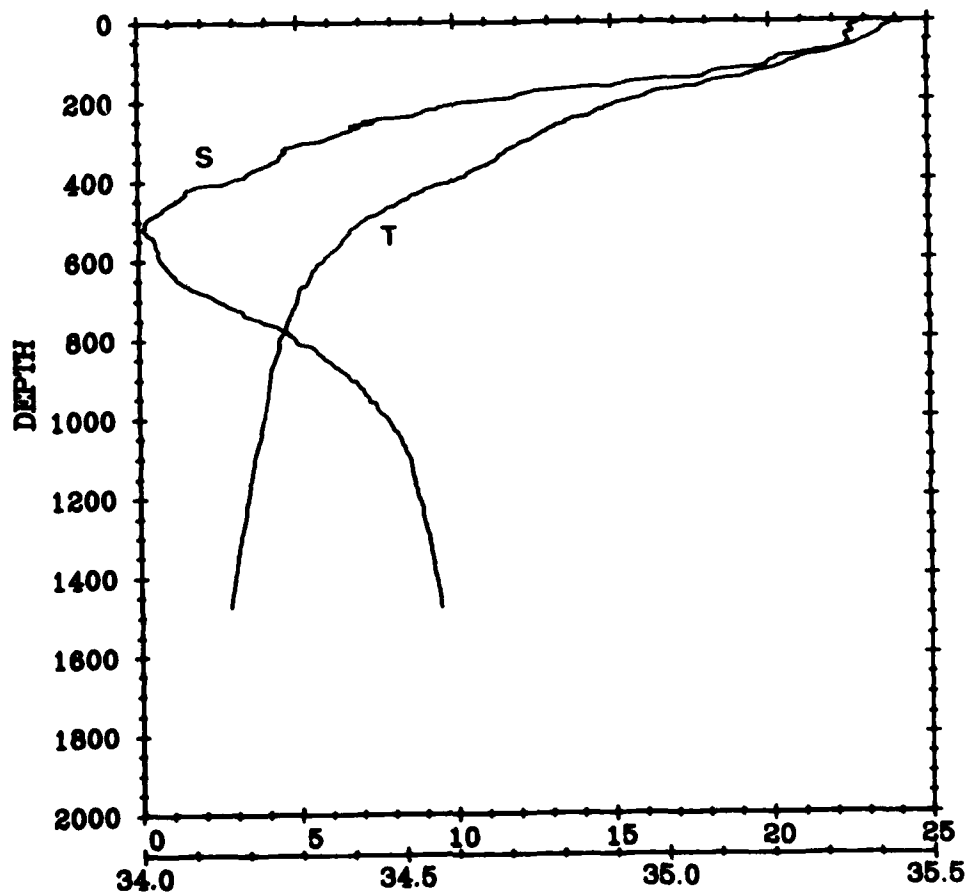
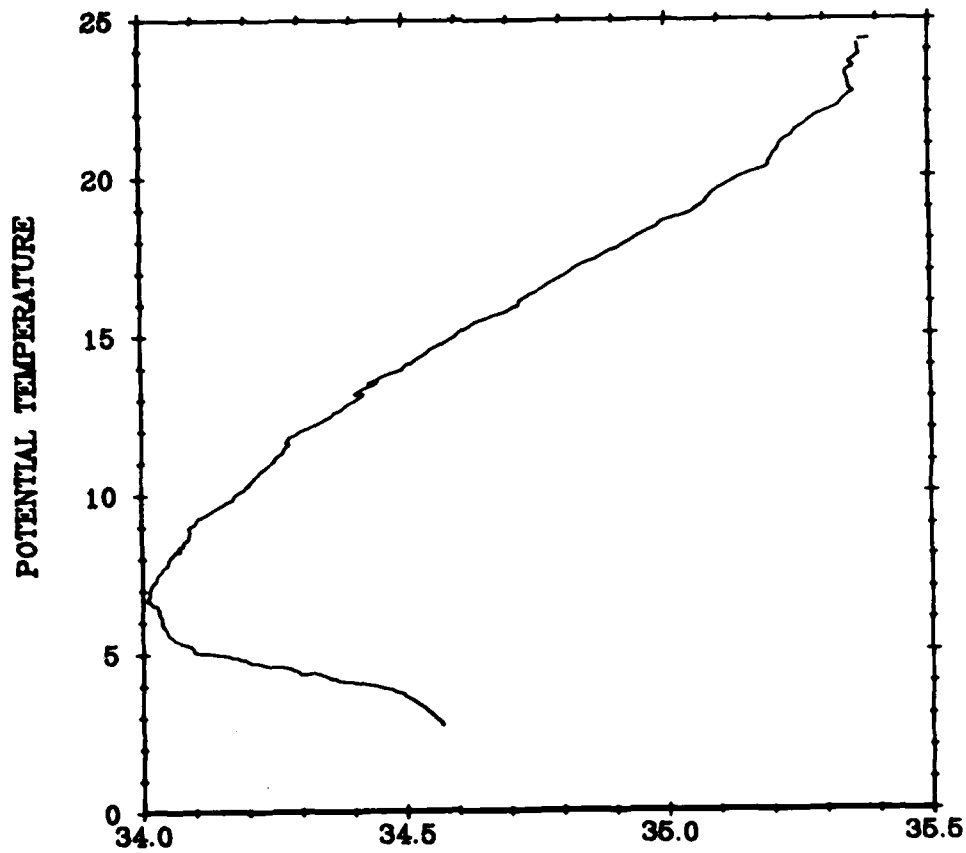
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 2	SIGMA 2	SIGMA 4	SIGMA 4	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				ML TUN		M
0	24.117	35.371	24.117	23.849	32.217	40.189	400.611	0.000	0
20	23.608	35.356	23.604	24.029	32.372	40.157	388.058	0.079	19
40	23.231	35.343	23.223	24.135	32.487	40.082	379.860	0.156	39
60	22.939	35.347	22.937	24.288	32.556	40.065	365.005	0.231	59
80	21.934	35.283	21.919	24.485	32.978	40.110	346.997	0.301	79
100	20.786	35.210	20.767	24.719	33.143	40.205	326.475	0.369	99
120	18.474	34.986	18.448	25.141	33.650	40.382	281.790	0.510	119
140	15.558	34.659	15.527	25.542	34.194	40.422	244.787	0.674	139
160	13.720	34.456	13.684	25.833	34.604	40.398	222.746	0.771	159
180	12.383	34.342	12.343	26.013	34.737	40.380	206.401	0.878	179
200	11.293	34.259	11.249	26.154	34.923	40.328	191.631	0.978	199
220	10.027	34.178	9.987	26.124	35.137	40.373	178.479	1.071	219
240	8.446	34.175	8.399	26.088	35.381	40.393	162.711	1.156	239
260	7.208	34.120	7.167	26.025	35.576	40.332	149.461	1.234	259
280	5.948	34.142	5.896	26.021	35.837	40.453	129.716	1.313	279
300	4.980	34.142	4.924	26.024	36.061	40.716	102.431	1.404	299
320	4.443	34.290	4.381	26.191	36.264	40.941	95.911	1.549	319
340	4.111	34.196	4.041	26.371	36.399	40.993	94.999	1.644	339
360	3.319	34.464	3.244	26.376	36.481	40.895	78.318	1.777	359
380	3.600	34.509	3.514	26.443	36.567	40.884	72.118	1.846	379
400	3.403	34.627	3.316	26.478	36.612	40.839	69.427	1.917	399
420	3.176	34.585	3.083	26.514	36.650	40.898	66.220	1.984	419
440	2.978	34.569	2.879	26.543	36.700	40.848	61.177	2.049	439
460	2.793	34.570	2.688	26.570	36.736	40.894	60.955	2.110	459

## WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	D15 O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 2	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	UM/L	DEG C				DB
0	23.082	35.345	5.02	102.3	2.9	0.13	1.1	0.00	20.071	24.074	34.333	40.612	40.612	0
10	20.650	35.199	5.18	101.6	2.1	0.13	1.1	0.00	20.610	24.147	34.370	40.241	40.241	19
20	19.240	35.073	4.82	92.0	2.3	0.26	1.3	0.12	19.215	24.123	34.436	40.504	40.504	39
30	17.377	34.957	5.11	94.0	2.9	0.27	1.7	0.23	17.349	24.122	34.919	42.124	42.124	59
40	15.851	34.700	4.91	97.6	4.3	0.43	4.4	0.02	15.829	25.556	34.146	42.364	42.364	79
50	13.655	34.444	5.11	97.1	5.6	0.59	7.1	0.01	13.619	25.819	34.312	42.479	42.479	99
60	11.143	34.252	5.31	95.7	12.3		11.9	0.01	11.119	26.070	34.347	40.717	40.717	119
70	9.312	34.070	4.20	63.6					9.285	26.501	35.400	43.806	43.806	139
80	7.147	34.020	3.38	49.3	44.3		27.7	0.02	7.099	26.633	35.587	44.140	44.140	159
90	6.447	34.030	2.67	38.7	56.1		32.2	0.01	6.397	26.735	35.722	44.311	44.311	179
100	4.610	34.242	0.66	9.4	99.7		42.9	0.02	4.571	27.122	36.194	44.956	44.956	199
110	4.453	34.288	0.62	8.6	104.8	1.09	41.4	0.01	4.392	27.178	36.260	44.919	44.919	219
120	4.327	34.338	0.63	8.7	107.5	3.11	41.5	0.01	4.263	27.232	36.310	45.111	45.111	239
130	4.010	34.437	0.82	11.2	113.5		41.5	0.02	3.936	27.345	36.448	45.146	45.146	259
140	3.384	34.530	1.28	17.3	127.2	2.98	42.9	0.01	3.295	27.482	36.517	45.140	45.140	279
150	2.793	34.570	1.53	20.3	141.8		42.2	0.02	2.688	27.570	36.736	45.494	45.494	299



# MARATHON 2 STA. 8

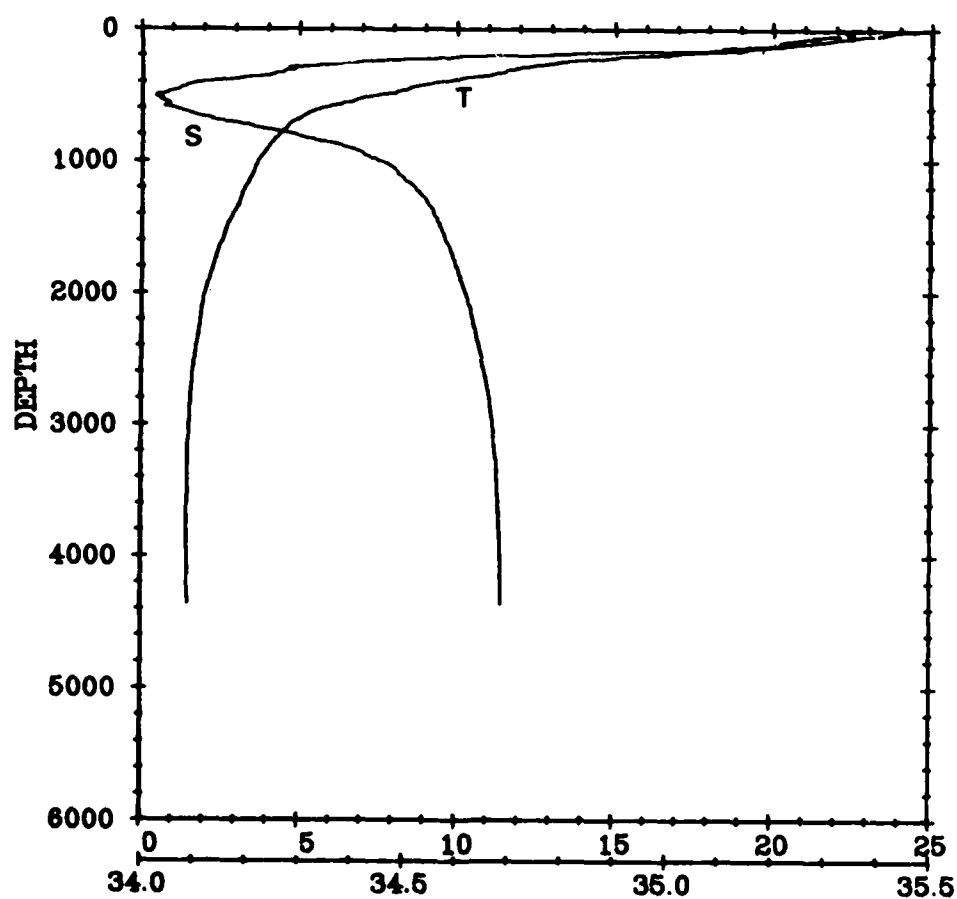
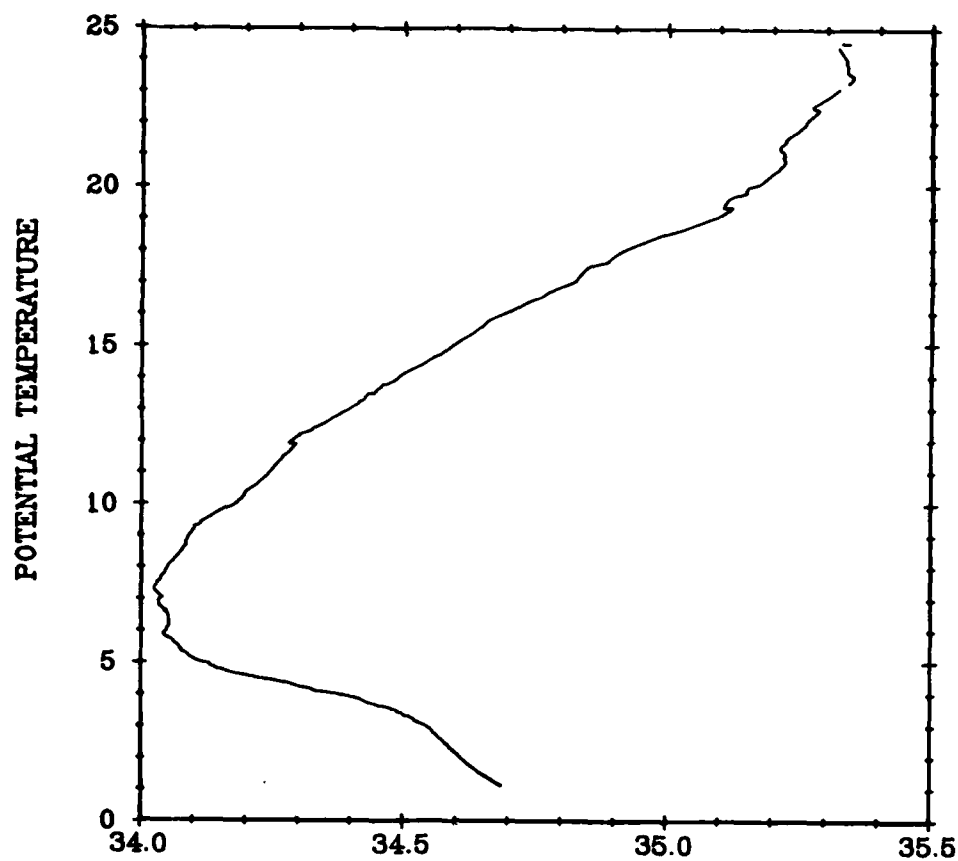


LATITUDE	LONGITUDE	MO-DY-YR	START TIME GMT	BOTTOM M	WIND DIR	SPEED AT	AIR TEMP DEG C	WET BULB DEG C	BAROM MB
24 6 ON	155 21 OW	50 7 84	1435	4364	30	6	23.9	21.1	1018.6

STD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	24.312	35.173	24.312	23.802	32.126	40.093	409.924	0.100	1
20	23.710	35.339	23.716	23.984	32.323	40.306	392.436	0.180	19
40	23.330	35.519	23.322	24.099	32.449	40.442	382.258	0.158	39
60	22.531	35.280	22.489	24.294	32.668	40.682	364.457	0.232	59
80	21.793	35.246	21.792	24.467	32.961	40.895	348.716	0.304	79
100	21.156	35.217	21.137	24.623	33.036	41.089	334.577	0.372	99
120	19.203	35.101	19.176	25.054	33.529	41.637	295.140	0.529	119
140	16.130	34.710	16.098	25.503	34.084	42.292	253.457	0.666	139
160	13.319	34.422	13.284	25.859	34.575	42.884	217.299	0.784	159
180	11.907	34.289	11.959	26.062	34.806	43.167	201.128	0.889	179
200	11.034	34.243	10.991	26.198	34.958	43.364	190.205	0.937	199
220	9.625	34.131	9.580	26.344	35.185	43.678	175.497	1.078	219
240	8.535	34.075	8.489	26.475	35.165	43.863	163.144	1.163	239
260	7.610	34.033	7.561	26.579	35.511	44.049	153.276	1.242	259
280	6.913	34.053	6.863	26.834	35.852	44.469	128.436	1.198	279
300	4.876	34.145	4.820	27.018	36.180	44.747	111.934	1.501	299
320	4.189	34.281	4.128	27.180	36.265	44.947	95.935	1.606	319
340	4.028	34.388	3.961	27.303	36.406	45.103	84.610	1.694	339
360	3.714	34.451	3.641	27.386	36.504	45.206	77.092	1.777	359
380	3.526	34.489	3.446	27.435	36.563	45.294	72.843	1.952	379
400	3.107	34.719	3.221	27.481	36.620	45.352	68.739	1.923	399
420	3.110	34.541	3.017	27.515	36.654	45.404	65.703	1.490	419
440	2.948	34.557	2.829	27.547	36.706	45.437	62.861	1.154	439
460	2.733	34.568	2.628	27.573	36.743	45.504	60.352	2.116	459
480	2.595	34.579	2.484	27.594	36.771	45.539	58.543	2.176	479
500	2.424	34.590	2.337	27.618	36.805	45.582	56.152	2.233	499
520	2.297	34.598	2.173	27.636	36.830	45.613	54.534	2.288	519
540	2.163	34.607	2.033	27.654	36.856	45.646	52.718	2.342	539
560	2.049	34.615	1.912	27.670	36.878	45.676	51.177	2.394	559
580	1.951	34.623	1.807	27.685	36.899	45.701	49.795	2.444	579
600	1.878	34.630	1.726	27.696	36.915	45.721	48.763	2.494	599
620	1.813	34.636	1.654	27.707	36.929	45.739	47.879	2.542	619
640	1.752	34.641	1.585	27.716	36.942	45.755	47.091	2.589	639
660	1.693	34.647	1.518	27.725	36.955	45.772	46.234	2.636	659
680	1.644	34.652	1.461	27.734	36.966	45.786	45.557	2.682	679
700	1.611	34.657	1.410	27.741	36.977	45.799	44.940	2.727	699
720	1.557	34.662	1.358	27.749	36.988	45.812	44.292	2.772	719
740	1.541	34.664	1.331	27.753	36.992	45.819	44.225	2.816	739
760	1.516	34.668	1.299	27.758	37.000	45.828	43.981	2.860	759
780	1.499	34.670	1.273	27.762	37.005	45.834	43.782	2.904	779
800	1.482	34.672	1.246	27.765	37.009	45.840	43.674	2.948	799
820	1.467	34.675	1.222	27.769	37.015	45.847	43.515	2.991	819
840	1.466	34.676	1.211	27.771	37.017	45.849	43.697	3.035	839
860	1.464	34.678	1.199	27.773	37.020	45.853	43.791	3.079	859
880	1.457	34.679	1.182	27.775	37.023	45.857	43.878	3.122	879
900	1.455	34.681	1.169	27.777	37.026	45.861	43.966	3.166	899
920	1.452	34.682	1.156	27.779	37.029	45.864	44.107	3.210	919
940	1.455	34.683	1.148	27.781	37.031	45.866	44.339	3.255	939
960	1.458	34.683	1.140	27.781	37.031	45.868	44.641	3.299	959
980	1.464	34.684	1.135	27.782	37.033	45.869	44.920	3.344	979
1000	1.471	34.685	1.130	27.784	37.034	45.871	45.207	3.389	999
1020	1.478	34.686	1.126	27.784	37.035	45.872	45.583	3.434	1019
1040	1.489	34.686	1.126	27.785	37.036	45.872	45.948	3.480	1039
1060	1.493	34.686	1.126	27.785	37.036	45.872	46.095	3.495	1059

NISKIN BOTTLE DATA		DIS O2 ML/L	O2 SAT	SIG3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C												
1	24.271	15.319	4.90	102.6	1.1	0.13	0.0	0.00	24.271	23.804	32.128	40.097	1
26	23.571	15.340	5.01	103.6	0.6	0.09	0.0	0.00	23.566	24.129	32.372	40.358	26
56	22.435	15.268	4.98	100.9	0.4	0.12	0.0	0.00	22.424	24.103	32.679	40.696	56
106	20.529	15.198	5.18	101.4	0.6	0.11	0.0	0.00	20.509	24.779	33.210	41.280	106
156	18.146	14.971	5.25	98.5	1.8	0.17	0.1	0.06	18.119	25.172	33.675	41.811	156
207	15.327	14.616	5.02	88.6	3.7	0.46	4.3	0.02	15.295	25.612	34.221	42.458	207
307	11.972	14.287	5.28	86.6	9.8	0.79	10.2	0.01	11.832	26.068	34.813	43.176	308
408	9.638	14.133	4.74	74.0	19.9	1.21	17.1	0.01	9.591	26.344	35.184	43.636	410
508	7.129	14.023	3.33	49.0	43.5		27.9	0.01	7.080	26.638	35.593	44.152	510
608	5.612	14.070	1.68	23.9	71.6	2.62	37.1	0.01	5.580	26.870	35.896	44.521	611
708	4.197	14.155	0.99	13.8	90.6	2.92	41.3	0.01	4.740	27.035	36.101	44.764	712
816	4.299	14.105	0.66	9.1	106.0	3.07	43.3	0.01	4.237	27.209	36.298	44.983	811
906	4.110	14.191	0.80	11.0	115.2	3.09	43.4	0.00	3.961	27.306	36.408	45.105	912
1016	3.772	14.443	0.94	12.8	120.0	3.07	43.2	0.00	3.697	27.374	36.489	45.198	1013
1125	3.219	14.526	1.35	18.1	130.5		42.6	0.00	3.127	27.495	36.639	45.375	1125
1225	2.758	14.570	1.56	20.7	141.7		42.2	0.00	2.651	27.573	36.741	45.501	1218
1325	2.365	14.595	1.76	23.1	151.2		41.7	0.02	2.242	27.628	36.818	45.598	1371
1425	2.075	14.615	2.03	25.5	160.0		41.1	0.00	1.935	27.668	36.875	45.670	2025
1516	1.696	14.648		166.4			39.8	0.01	1.518	27.726	36.956	45.772	2514
1606	1.311	14.671	3.04	39.0	164.8	2.62	38.4	0.00	1.289	27.761	37.003	45.831	3044
1705	1.462	14.680	3.11	42.4	161.7	2.56	37.6	0.00	1.191	27.775	37.022	45.856	3553
1803	1.461	14.685	3.19	41.3			37.1	0.02	1.135	27.781	37.033	45.870	4063
1912	1.493	14.686	3.51	44.9	157.6	2.47	37.0	0.01	1.125	27.785	37.035	45.872	4431

# MARATHON 2 STA. 9



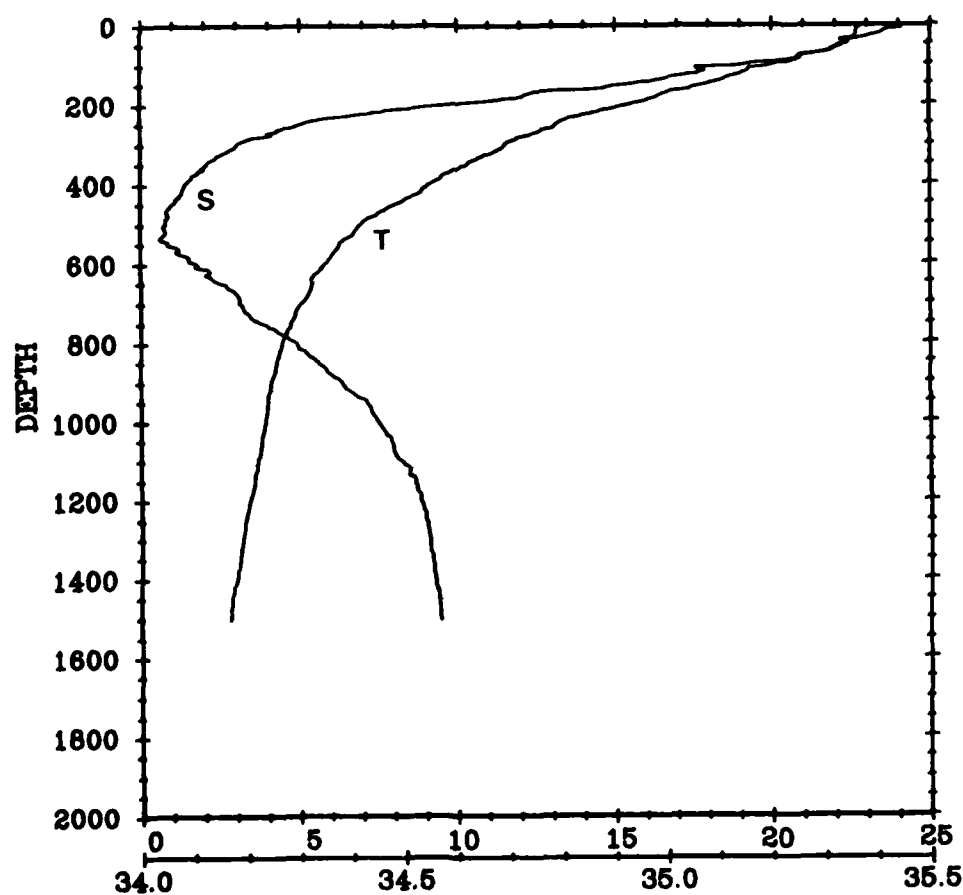
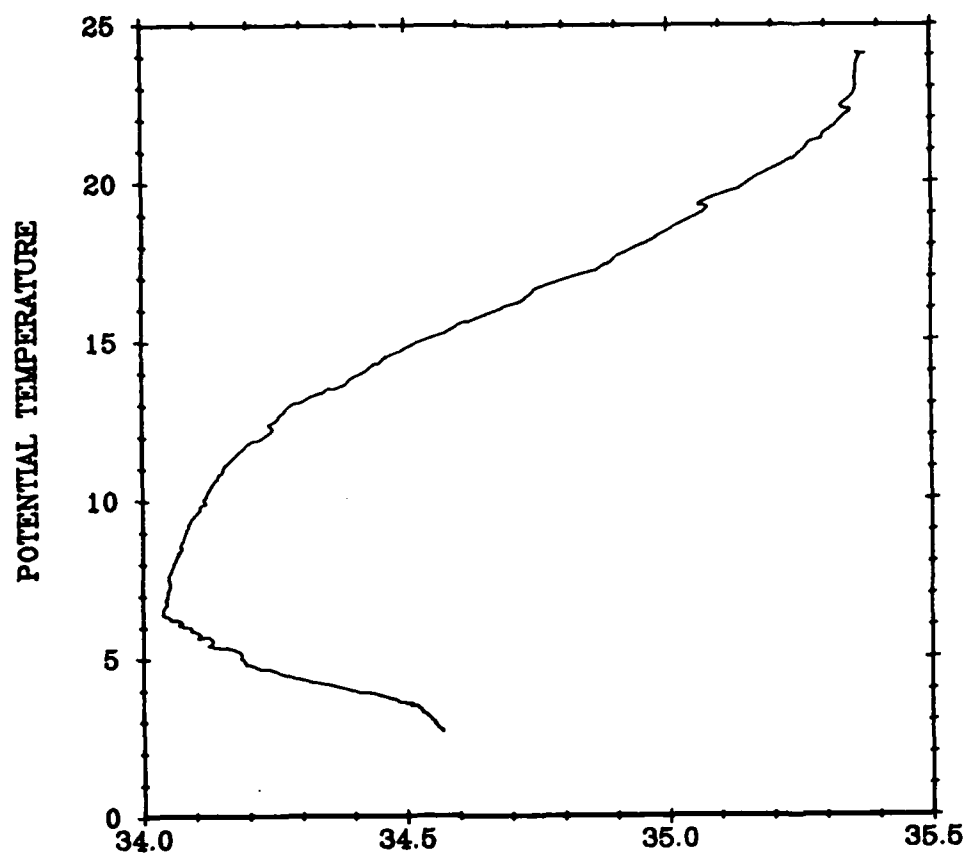
R. V. THOMAS WASHINGTON MARATHON LEG II STATION 17

LATITUDE	LONGITUDE	MO. DY. YR.	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
24 29 IN	155 3 54	5 7 94	2142	3.23	DIR	KT	DEG C	DEG C	MB
					40	8	25.0	21.7	1020.0

STD DATA		POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
PRESS	TEMP	DEG C				CL/TON		M
00	23.949	35.355	23.929	32.251	40.237	196.853	0.000	0
10	23.366	35.359	23.362	32.451	40.443	181.099	0.078	19
20	22.474	35.345	22.466	32.450	40.738	159.020	0.102	39
30	21.891	35.321	21.869	32.500	40.922	144.806	0.222	59
40	21.033	35.257	21.019	32.586	41.157	127.791	0.289	79
50	20.040	35.102	20.024	32.673	41.320	110.714	0.353	99
60	17.909	34.928	17.883	32.747	41.764	91.914	0.500	119
70	15.495	34.597	15.464	32.559	42.395	247.893	0.631	139
80	13.174	34.375	13.139	32.522	42.837	222.965	0.749	159
90	11.557	34.195	11.519	32.547	43.192	202.079	0.855	179
100	10.126	34.125	10.285	32.522	43.456	186.634	0.953	199
110	9.189	34.196	9.145	32.380	43.711	171.767	1.042	219
120	8.135	34.262	8.090	32.524	43.947	158.112	1.125	239
130	6.994	34.245	6.947	32.575	44.200	143.527	1.200	259
140	5.854	34.198	5.802	32.565	44.494	125.631	1.335	279
150	5.091	34.187	5.024	32.529	44.729	110.141	1.453	299
160	4.441	34.295	4.379	32.178	44.940	96.195	1.555	319
170	4.122	34.175	4.054	32.284	45.382	86.612	1.647	339
180	3.897	34.445	3.822	32.364	45.472	79.608	1.730	359
190	3.592	34.487	3.501	32.419	45.538	74.821	1.808	379
200	3.415	34.528	3.329	32.478	45.611	69.407	1.891	399
210	3.192	34.545	3.089	32.514	45.659	66.091	1.947	419
220	2.991	34.555	2.894	32.540	45.695	63.775	2.012	439
230	2.798	34.557	2.592	32.567	45.734	61.194	2.075	459
240	2.781	34.559	2.574	32.570	45.718	60.919	2.085	479

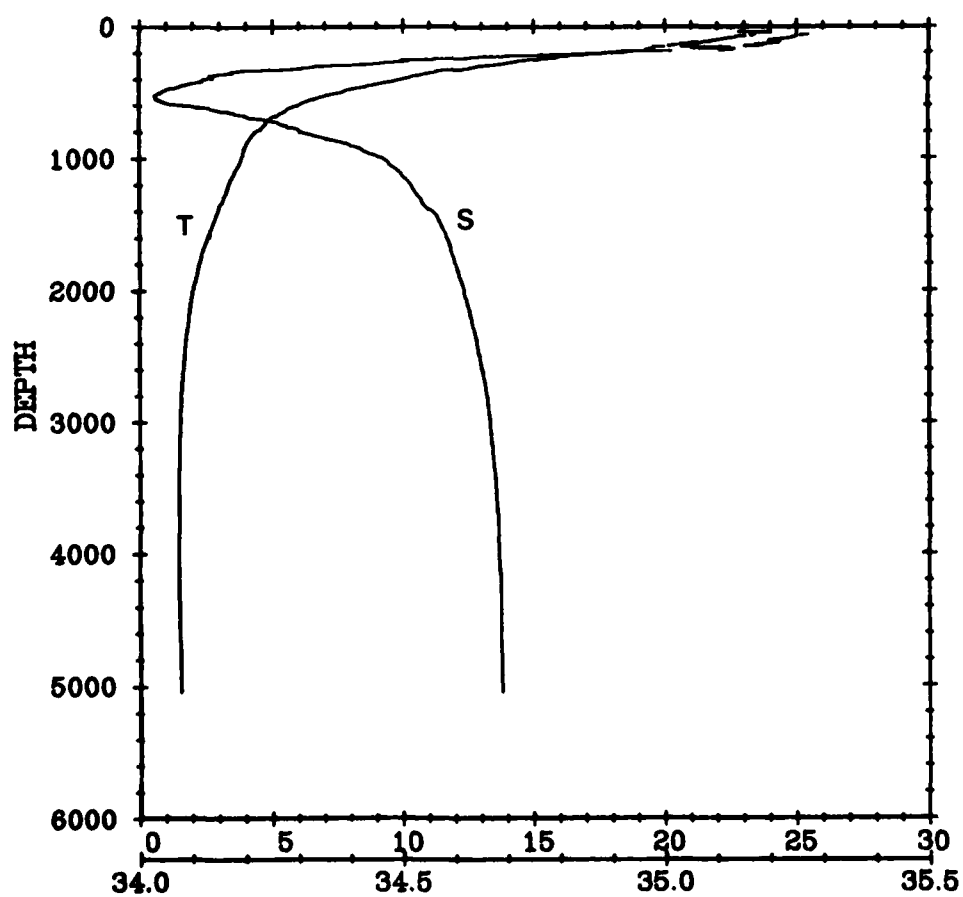
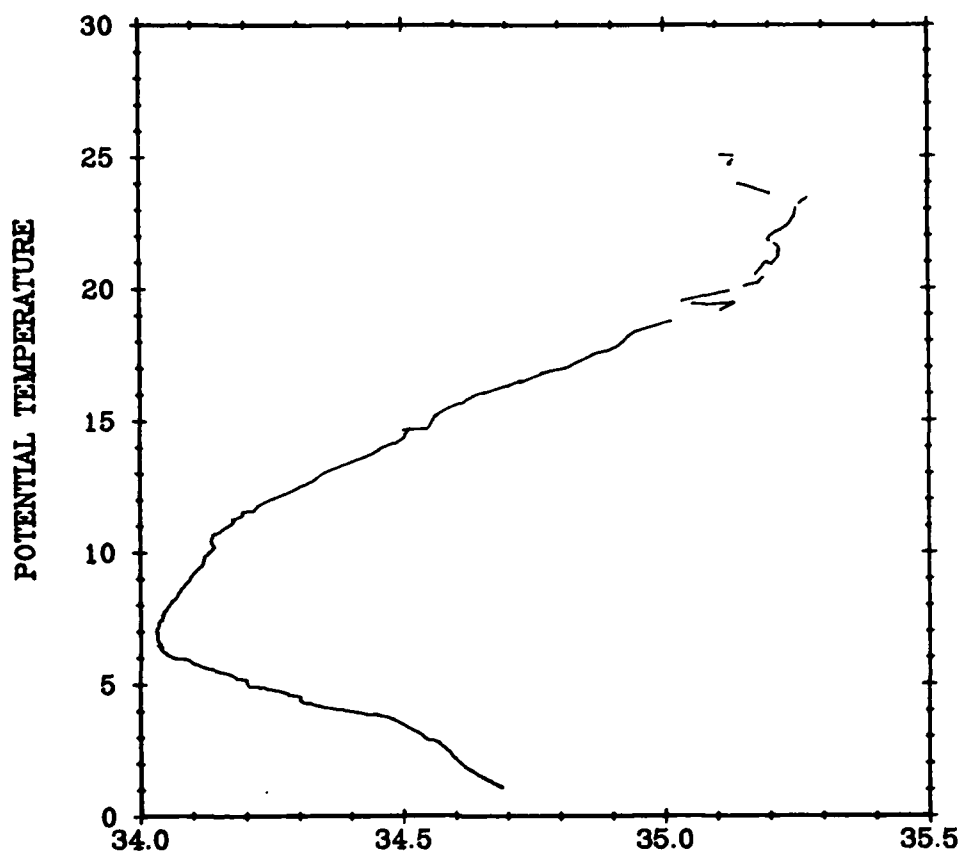
WISKIN BOTTLE DATA		DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
DEPTH	TEMP	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
0	24.013	35.358	4.92	102.9	1.2	0.11	0.0	0.00	24.293	21.857	32.281	40.189	0
10	23.474	35.356	5.20	104.5	1.5	0.18	0.0	0.00	21.953	24.470	32.458	40.386	19
20	22.508	35.321	5.26	101.0	1.9	0.0	0.0	0.00	19.489	24.939	33.463	41.552	39
30	21.812	34.974	5.14	95.4	2.1	0.19	0.6	0.13	19.103	25.178	33.681	41.818	59
40	20.726	34.759	4.61	84.1	3.3	0.43	4.3	0.01	16.708	25.399	33.959	42.146	79
50	18.349	34.569	4.64	81.9	4.5	0.54	5.9	0.01	15.116	25.571	34.180	42.407	99
60	12.974	34.299	4.55	75.3	8.7	0.79	10.0	0.00	12.869	25.868	34.572	42.897	119
70	11.287	34.170	4.48	72.5	13.5	1.02	13.9	0.00	11.249	26.094	34.955	43.241	139
80	9.010	34.082	4.03	62.0	25.9		21.1	0.00	8.936	26.402	35.269	43.747	159
90	6.895	34.045	2.59	37.9	49.9		31.1	0.00	6.817	26.689	35.654	44.224	179
100	5.653	34.125	1.12	15.9	73.4		38.9	0.01	5.601	26.911	35.934	44.559	199
110	4.924	34.193	0.77	10.2	90.1		41.9	0.00	4.867	27.051	36.110	44.767	219
120	4.401	34.275	0.49	6.8	103.6		43.6	0.00	4.338	27.190	36.274	44.955	239
130	4.136	34.382	0.61	8.6	110.7	3.10	43.8	0.00	4.017	27.293	36.392	45.187	259
140	3.979	34.451	0.93	12.7	115.3	3.04	43.2	0.00	3.803	27.370	36.479	45.183	279
150	3.248	34.538	1.30	17.5	129.4		42.7	0.01	3.157	27.502	36.644	45.178	299
160	2.781	34.559	1.55	20.6	139.6	2.91	42.2	0.00	2.674	27.569	36.737	45.495	319

# MARATHON 2 STA. 10





# MARATHON 2 STA. 11



S/V THOMAS WASHINGTON MARATHON LEG II STATION 12

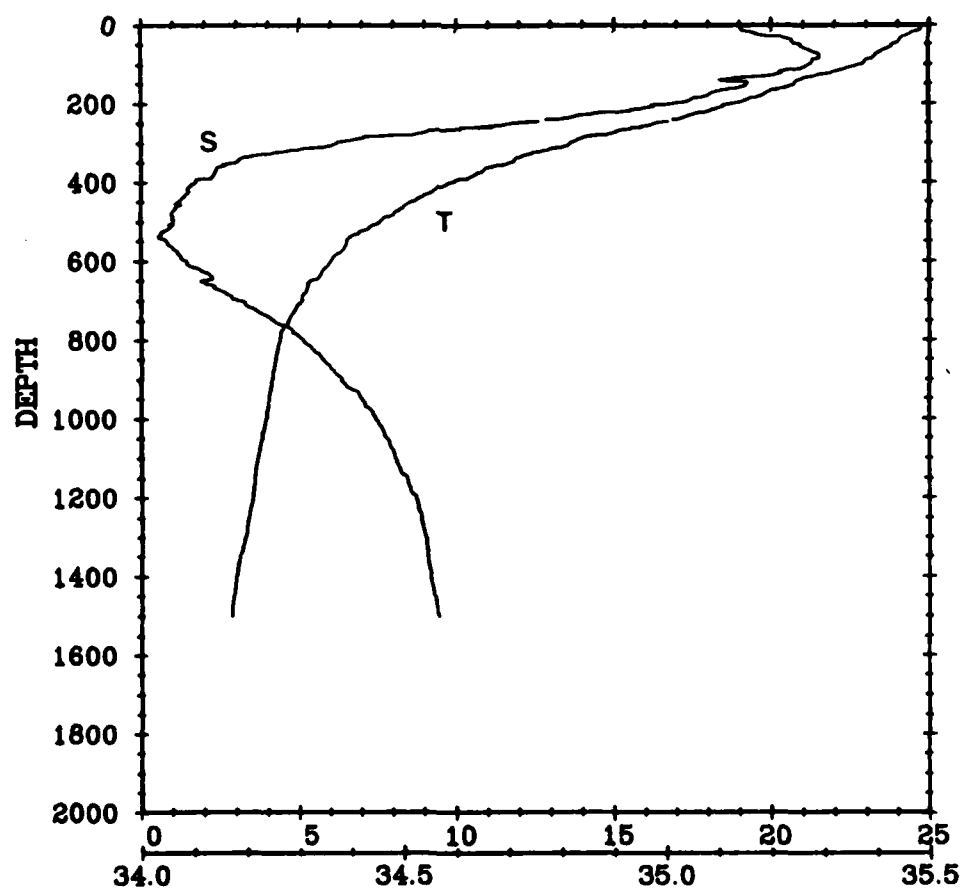
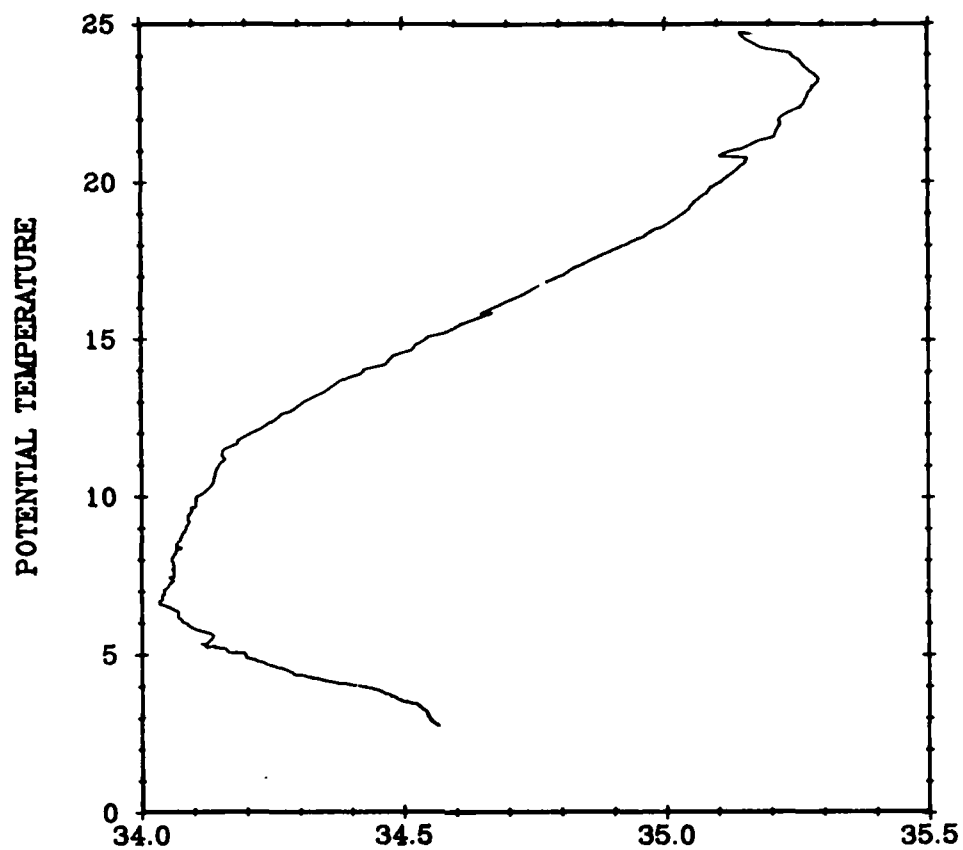
LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
25 11 0N	154 28 6W	5/ 8/84	0800	4990	110	11	23.3	21.1	1021.7

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	24.708	35.148	24.708	23.543	31.959	39.918	433.612	0.100	0
20	24.438	35.168	24.434	23.641	31.963	39.930	425.137	0.186	19
40	24.027	35.237	24.019	23.817	32.149	40.125	409.177	0.169	39
60	23.649	35.267	23.635	23.952	32.295	40.280	397.076	0.250	59
80	23.225	35.287	23.209	24.091	32.446	40.442	384.523	0.328	79
100	22.758	35.270	22.738	24.215	32.582	40.591	373.592	0.404	99
150	20.691	35.145	20.663	24.697	33.125	41.191	329.419	0.580	149
200	18.795	35.007	18.760	25.089	33.577	41.700	291.502	0.735	199
250	16.391	34.716	16.351	25.443	34.021	42.222	260.263	0.874	249
300	13.684	34.380	13.641	25.783	34.457	42.753	228.971	0.996	298
350	11.677	34.176	11.632	26.019	34.774	43.146	206.658	1.105	348
400	9.932	34.107	9.886	26.274	35.103	43.543	182.137	1.202	398
450	8.635	34.073	8.587	26.457	35.343	43.837	164.910	1.289	447
500	7.636	34.061	7.586	26.597	35.528	44.164	151.585	1.368	497
600	6.044	34.082	5.991	26.829	35.834	44.441	129.125	1.509	596
700	5.081	34.179	5.024	27.022	36.073	44.723	110.915	1.629	695
800	4.378	34.302	4.317	27.198	36.283	44.965	94.246	1.731	794
900	4.130	34.377	4.062	27.284	36.382	45.074	86.633	1.822	893
1000	3.942	34.444	3.867	27.358	36.464	45.165	80.292	1.905	992
1100	3.690	34.482	3.609	27.414	36.533	45.246	75.295	1.983	1091
1200	3.510	34.518	3.422	27.461	36.589	45.311	71.261	2.056	1190
1300	3.293	34.539	3.199	27.499	36.639	45.371	67.950	2.126	1289
1400	3.020	34.551	2.920	27.534	36.689	45.435	64.390	2.192	1388
1500	2.815	34.554	2.729	27.561	36.726	45.482	61.854	2.255	1487
1514	2.822	34.556	2.715	27.564	36.730	45.486	61.635	2.264	1500

NISKIN BOTTLE DATA		SALINITY	DIS O2 ML/L	O2 SAT %	SiO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C													
13	24.662	35.141	4.97	102.5	2.2	0.15	0.0	0.00	24.659	23.553	31.869	39.910	13	
53	23.713	35.262	4.95	102.6	1.7	0.0	0.0	0.00	23.702	23.929	32.270	40.254	53	
103	22.239	35.239	4.97	100.3	1.7	0.11	0.0	0.00	22.218	24.339	32.721	40.744	103	
135	20.717	35.145	4.59	90.1	1.6	0.24	0.8	0.04	20.691	24.689	33.116	41.191	135	
166	19.533	35.066	4.46	85.6	2.0	0.29	2.1	0.02	19.503	24.943	33.408	41.508	166	
203	18.057	34.923	4.56	95.0	2.7	0.34	1.1	0.01	18.022	25.209	33.722	41.867	203	
253	15.177	34.564	4.45	78.3	6.0	0.59	6.8	0.01	15.138	25.606	34.222	42.465	254	
304	12.738	34.282	4.39	73.3	10.0		11.0	0.00	12.697	25.897	34.608	42.939	305	
403	9.934	34.124	4.16	65.2	21.4		18.3	0.01	9.787	26.304	35.136	43.580	404	
505	7.603	34.064	2.85	42.4	42.9		28.4	0.01	7.553	26.604	35.516	44.074	507	
604	5.975	34.089	1.51	21.7	67.4		17.1	0.00	5.922	26.843	35.851	44.461	607	
704	5.120	34.194	0.73	10.3	86.5		42.0	0.00	5.062	27.029	36.079	44.727	708	
804	4.372	34.302	0.53	7.3	106.8	3.12	43.8	0.00	4.310	27.198	36.284	44.966	809	
904	4.126	34.381	0.67	9.2	113.0	3.12	44.0	0.00	4.057	27.288	36.395	45.078	910	
1004	3.907	34.449	0.88	12.0	118.9		43.6	0.01	3.831	27.365	36.473	45.176	1011	
1255	3.355	34.534	1.29	17.4	129.0	2.97	43.0	0.00	3.263	27.489	36.625	45.354	1265	
1498	2.825	34.566	1.49	19.8	140.4		42.6	0.01	2.718	27.564	36.729	45.485	1511	



# MARATHON 2 STA. 12

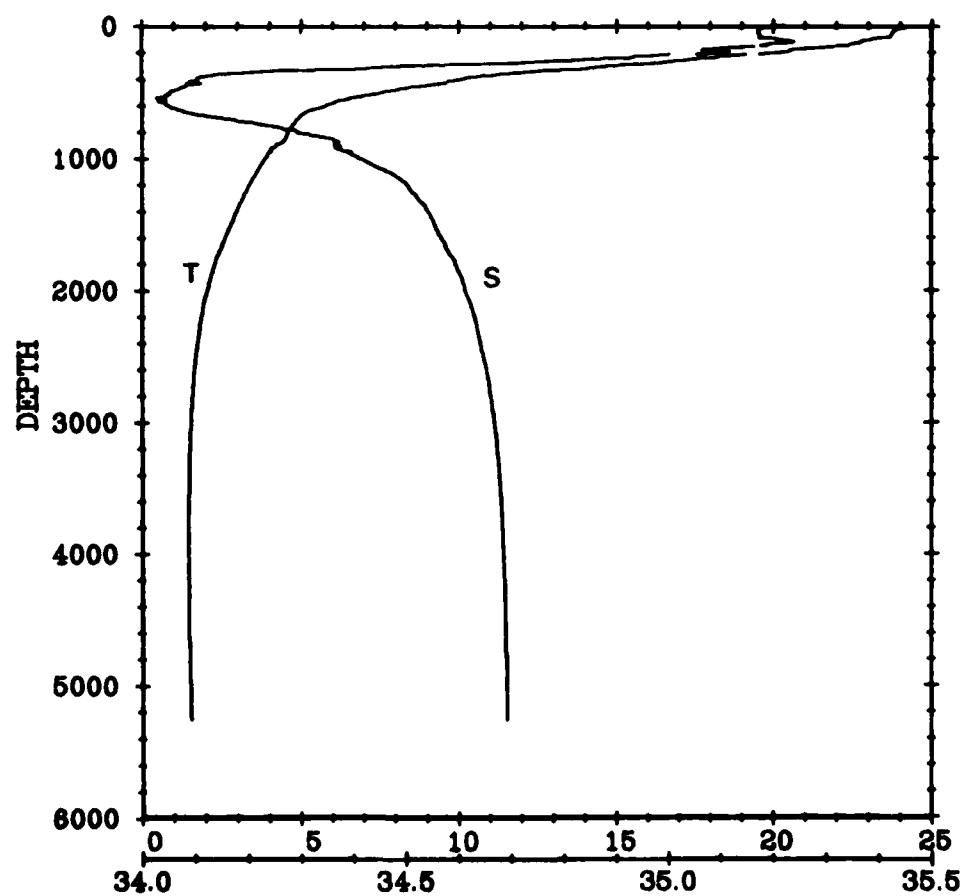
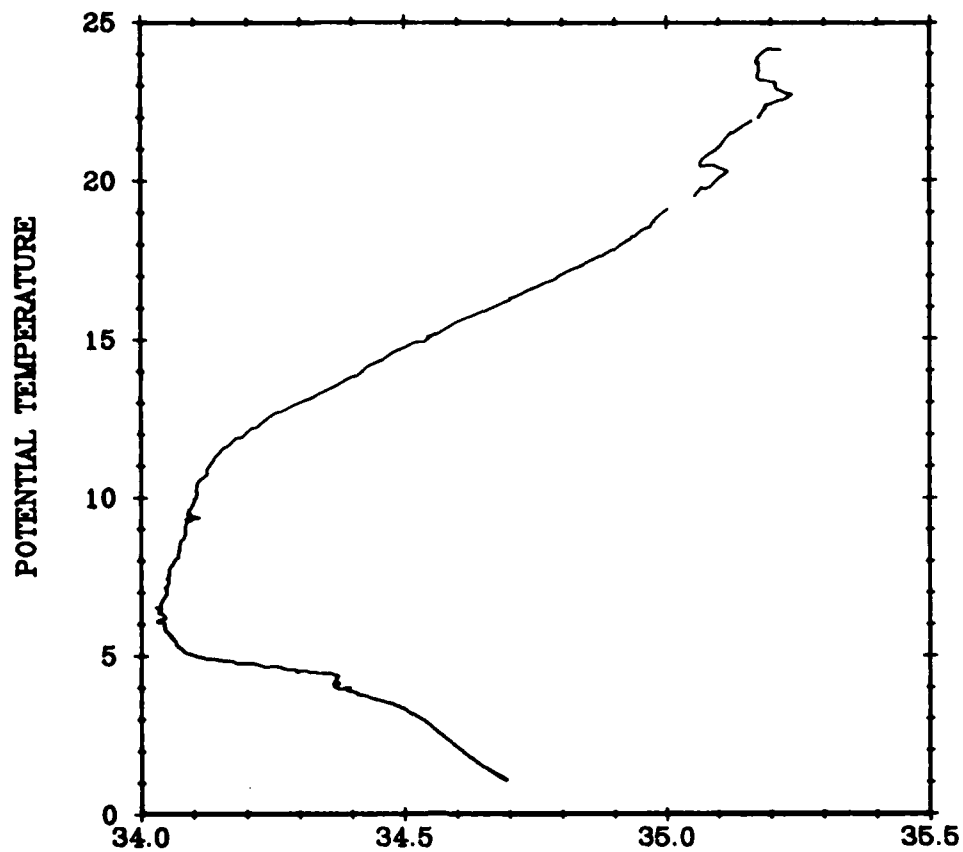


LATITUDE	LONGITUDE	MO	DAY	YEAR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAR M
					GMT	M	DIR	KT	DEG C	DEG C	MB
25 12 N	154 11 W	5	9	84	1900	5265	170	12	43.0	20.9	1.21

STD DATA											
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH		
DB	DEG C		DEG C				10 T M		M		
1	24.146	35.202	24.146	23.753	32.182	40.285	41.164	1.100	1		
20	23.997	35.191	23.993	23.782	32.116	40.293	41.164	1.190	19		
40	23.829	35.173	23.801	23.833	32.172	40.114	41.164	1.164	39		
60	23.742	35.171	23.729	23.854	32.175	40.117	41.164	1.249	59		
80	23.633	35.177	23.616	23.890	32.234	40.221	41.164	1.327	79		
100	23.126	35.200	23.105	24.156	32.414	40.424	41.164	1.415	99		
120	22.052	35.170	22.022	24.142	32.730	40.759	41.164	1.504	119		
140	20.175	35.098	20.138	24.951	33.246	41.327	41.164	1.593	139		
160	17.496	34.951	17.454	25.292	33.825	41.999	41.164	1.685	159		
180	14.935	34.524	14.890	25.610	34.256	42.537	41.164	1.779	179		
200	12.119	34.202	12.072	25.956	34.593	43.049	41.164	1.879	199		
220	10.160	34.104	10.113	26.233	35.052	43.484	41.164	1.979	219		
240	9.049	34.084	9.000	26.401	35.268	43.745	41.164	2.079	239		
260	7.662	34.053	7.612	26.587	35.517	44.052	41.164	2.179	259		
280	5.825	34.048	5.774	26.829	35.845	44.461	41.164	2.279	279		
300	4.914	34.151	4.858	27.018	36.079	44.731	41.164	2.379	299		
320	4.593	34.291	4.530	27.165	36.241	44.912	41.164	2.479	319		
340	4.250	34.367	4.181	27.264	36.355	45.042	41.164	2.579	339		
360	3.898	34.409	3.813	27.335	36.445	45.149	41.164	2.672	359		
380	3.627	34.461	3.546	27.403	36.526	45.241	41.164	2.772	379		
400	3.382	34.501	3.295	27.459	36.595	45.321	41.164	2.875	399		
420	3.174	34.521	3.081	27.495	36.642	45.381	41.164	2.979	419		
440	2.988	34.540	2.889	27.528	36.684	45.432	41.164	3.081	439		
460	2.812	34.554	2.706	27.556	36.721	45.479	41.164	3.184	459		
480	2.635	34.566	2.523	27.581	36.756	45.523	41.164	3.285	479		
500	2.477	34.578	2.359	27.604	36.789	45.563	41.164	3.385	499		
520	2.295	34.593	2.171	27.632	36.826	45.610	41.164	3.481	519		
540	2.174	34.604	2.043	27.651	36.852	45.642	41.164	3.575	539		
560	2.069	34.611	1.932	27.665	36.873	45.668	41.164	3.677	559		
580	1.950	34.621	1.806	27.693	36.897	45.699	41.164	3.779	579		
600	1.873	34.629	1.722	27.696	36.915	45.721	41.164	3.879	599		
620	1.803	34.635	1.644	27.707	36.929	45.740	41.164	3.979	619		
640	1.749	34.640	1.581	27.715	36.942	45.755	41.164	4.079	639		
660	1.691	34.646	1.516	27.725	36.955	45.771	41.164	4.179	659		
680	1.648	34.651	1.465	27.733	36.965	45.785	41.164	4.279	679		
700	1.612	34.656	1.421	27.740	36.975	45.797	41.164	4.379	699		
720	1.580	34.659	1.380	27.745	36.982	45.806	41.164	4.479	719		
740	1.550	34.663	1.342	27.751	36.990	45.816	41.164	4.579	739		
760	1.531	34.666	1.314	27.755	36.996	45.821	41.164	4.679	759		
780	1.512	34.670	1.285	27.761	37.003	45.832	41.164	4.779	779		
800	1.495	34.672	1.260	27.764	37.008	45.839	41.164	4.879	799		
820	1.480	34.675	1.234	27.769	37.013	45.845	41.164	4.979	819		
840	1.473	34.676	1.219	27.770	37.016	45.848	41.164	5.079	839		
860	1.466	34.679	1.201	27.774	37.021	45.854	41.164	5.179	859		
880	1.459	34.680	1.183	27.776	37.024	45.859	41.164	5.279	879		
900	1.452	34.682	1.166	27.779	37.027	45.862	41.164	5.379	899		
920	1.445	34.683	1.148	27.780	37.030	45.865	41.164	5.479	919		
940	1.449	34.683	1.142	27.781	37.031	45.867	41.164	5.579	939		
960	1.451	34.684	1.133	27.782	37.033	45.870	41.164	5.679	959		
980	1.456	34.685	1.127	27.784	37.035	45.871	41.164	5.779	979		
1000	1.459	34.686	1.118	27.785	37.036	45.874	41.164	5.879	999		
1020	1.460	34.687	1.109	27.786	37.038	45.876	41.164	5.979	1019		
1040	1.464	34.689	1.101	27.788	37.040	45.879	41.164	6.079	1039		
1060	1.467	34.688	1.093	27.789	37.041	45.880	41.164	6.179	1059		
1080	1.474	34.689	1.088	27.790	37.043	45.882	41.164	6.279	1079		
1100	1.482	34.689	1.084	27.790	37.043	45.882	41.164	6.379	1099		
1120	1.489	34.690	1.079	27.791	37.045	45.894	41.164	6.479	1119		
1140	1.495	34.691	1.073	27.792	37.046	45.896	41.164	6.579	1139		
1160	1.506	34.691	1.071	27.792	37.046	45.896	41.164	6.679	1159		
1180	1.517	34.691	1.070	27.792	37.047	45.896	41.164	6.779	1179		
1200	1.527	34.691	1.067	27.792	37.047	45.897	41.164	6.879	1199		
1220	1.537	34.692	1.064	27.793	37.048	45.898	41.164	6.979	1219		
1240	1.543	34.691	1.063	27.793	37.047	45.887	41.164	7.079	1239		

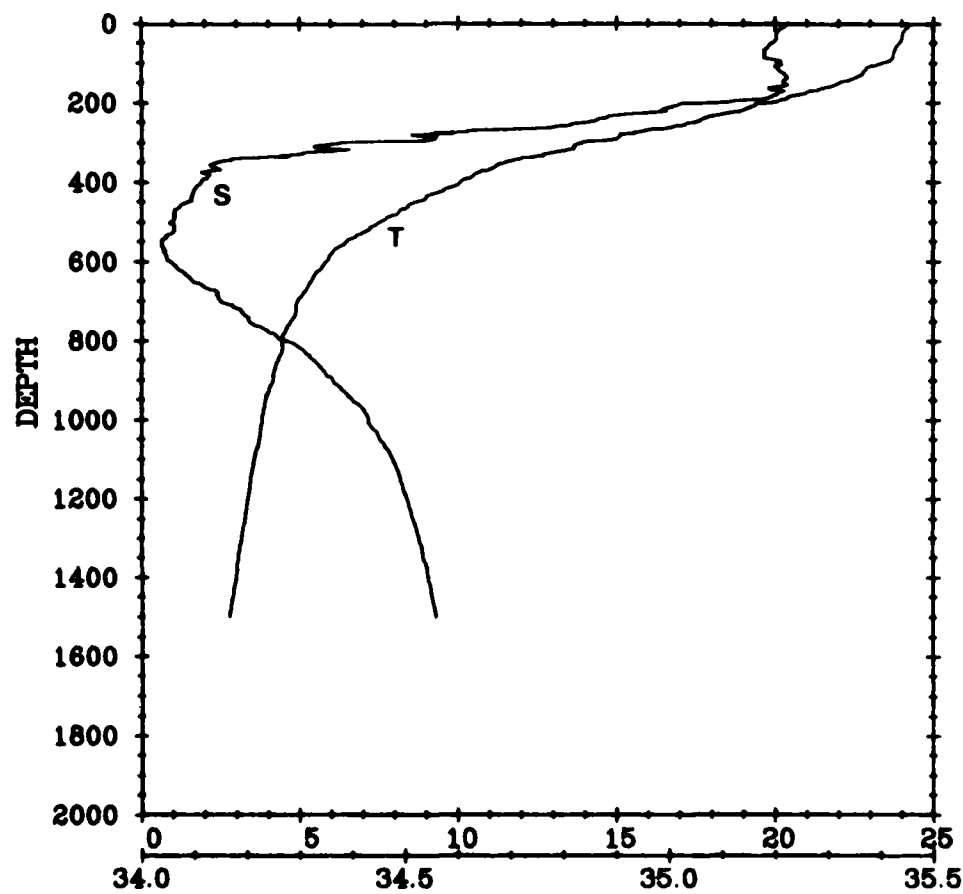
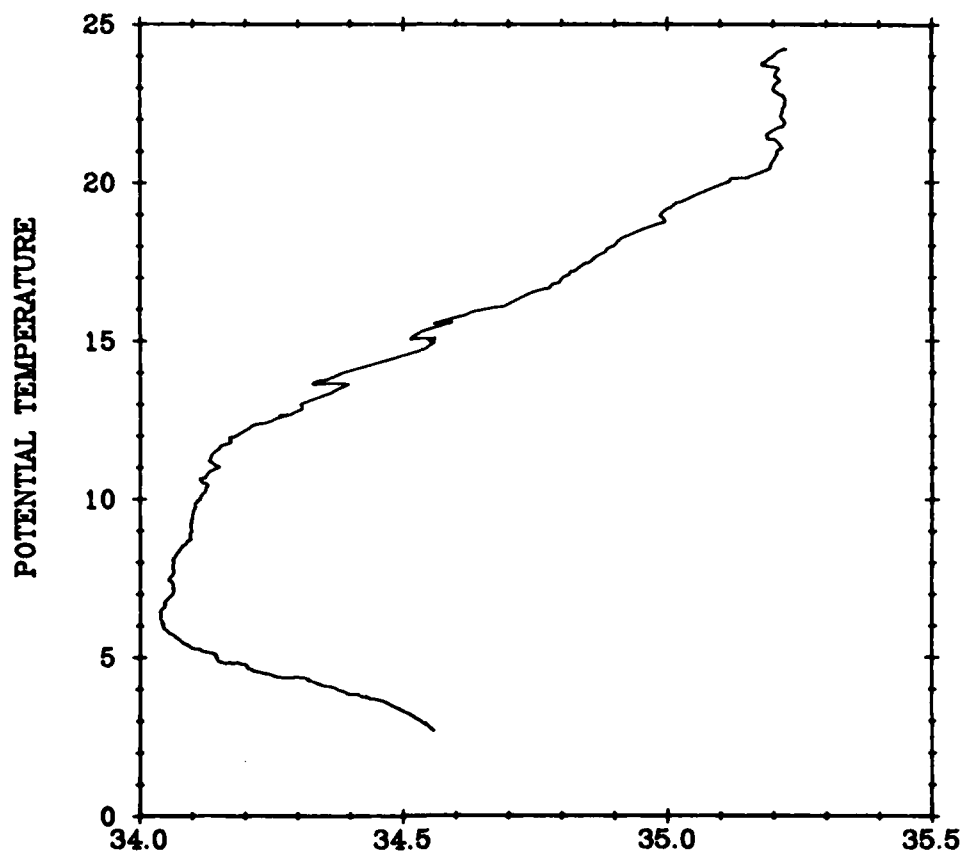
NISKIN BOTTLE DATA											
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C	
1	24.042	35.191	4.94	102.9	1.7	0.13	0.0	0.00	24.042	23.775	32.107
5	23.753	35.172	4.98	103.2	1.3	0.12	0.0	0.00	23.741	23.850	32.190
12	22.440	35.201	4.85	98.2	1.1	0.14	0.0	0.08	22.414	24.255	32.632
17	20.290	35.194	4.51	87.8	1.6	0.25	1.4	0.03	20.256	24.767	33.408
22	17.693	34.878	4.47	82.7	3.3	0.39	4.0	0.01	17.654	25.264	33.792
30	12.695	34.253	4.41	73.6	10.3	0.87	11.0	0.00	12.653	25.893	34.595
40	9.461	34.093	3.93	61.1	24.2	1.46	20.4	0.00	9.415	26.341	35.190
50	7.486	34.052	2.94	43.7	43.3		28.6	0.00	7.436	26.611	35.549
60	5.577	34.063	1.54	23.3	73.1	2.64	37.8	0.00	5.526	26.871	35.899
70	4.863	34.179	0.81	11.3	92.2	2.95	42.0	0.00	4.806	27.046	36.109
80	4.554	34.324	0.63	8.7	103.1	3.04	43.3	0.00	4.490	27.196	36.272
90	4.237	34.373	0.73	10.0	115.4	3.09	43.7	0.00	3.968	27.291	36.393
100	3.796	34.430	0.89	12.1	120.6	3.06	43.5	0.00	3.711	27.362	36.477
125	3.240	34.517	1.28	17.2	133.1		42.9	0.00	3.149	27.486	36.628
150	2.806	34.550	1.51	20.1	141.4		42.5	0.00	2.699	27.558	36.724
175	2.350	34.590	1.74	22.9	152.4		41.9	0.01	2.228	27.625	36.816
200	2.038	34.616	2.02	26.3	162.0		41.3	0.00	1.899	27.672	36.881
250	1.674	34.648	2.51	32.4	165.6		39.9	0.01	1.497	27.729	36.959
300	1.528	34.668	2.97	38.1	167.4	2.62	38.7	0.00	1.306	27.758	36.998
349	1.468	34.679	3.27	41.9	161.3	2.54	37.7	0.00	1.197	27.774	37.021
399	1.453	34.686	3.43	43.9	157.2		37.2	0.02	1.129	27.784	37.035
450	1.480	34.691	3.66	46.7	153.1	2.43	36.6	0.00	1.085	27.791	37.044
526	1.543	34.693	3.67	46.8	144.9		36.3	0.02	1.062	27.794	37.049

# MARATHON 2 STA. 13



WISKIN BUTTE DATA														
LEPCH	TEMP	GALINITY	DIG 02	P2 SAT	SIG0	P04	N01	N02	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML L	%	UMH	UM L	CM L	UMH	TUBIN	DEG C				DB
2	24.173	35.625	4.42	101.1	1.3	0.16	0.1	0.01		24.377	23.702	32.015	34.443	1
22	24.174	35.620	4.6	101.4	1.5	0.14	0.1	0.01		24.059	23.774	32.118	34.140	21
52	23.767	35.174	4.93	102.2	1.8	0.1	0.1	0.01		23.756	23.947	32.147	40.17	12
111	23.470	35.209	4.93	101.7	1.7	0.12	0.0	0.1		23.449	24.293	32.117	40.372	101
134	22.482	35.221	4.90	99.3	1.5	0.19	0.1	0.1		22.435	24.557	32.414	40.351	134
169	21.043	35.209	4.22	97.3	1.6	0.17	0.2	0.13		21.210	24.797	33.018	40.118	169
202	19.142	35.213	4.40	94.1	1.6	0.15	2.6	0.13		19.125	24.949	33.419	40.165	202
252	17.143	34.930	4.57	94.0	2.9	0.41	1.9	0.02		17.110	25.311	33.951	42.129	252
303	13.634	34.319	4.30	71.5	1.9		9.5	0.02		13.591	25.745	34.423	42.111	303
340	9.450	34.110	3.99	62.7	21.4		19.9	0.01		9.433	26.274	35.101	41.141	340
524	7.490	34.257	2.67	14.7	44.9		29.2	0.02		7.410	26.624	35.562	44.114	524
657	5.895	34.562	1.9	24.3	5		5.93	0.1		5.845	26.945	35.853	44.432	657
722	4.999	34.189	2.99	11.9	95.2		40.8	0.02		4.892	27.013	35.072	44.118	722
794	4.498	34.253	3.56	9.1	101.9	1.05	42.9	0.01		4.416	27.154	36.214	44.110	799
995	4.223	34.354	2.57	9.2	115.7	1.10	43.5	0.01		4.055	27.267	36.365	45.018	901
999	3.222	34.429	0.83	11.1	112.7		43.3	0.02		3.747	27.359	36.470	45.119	1015
1253	3.275	34.515	1.24	15.7	134.0	2.98	42.7	0.02		3.184	27.481	36.622	45.155	1252
1498	2.767	34.561	1.47	19.5	146.7		42.2	0.03		2.561	27.565	36.733	45.492	1498

# MARATHON 2 STA. 14



LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	WIND
25 13.1N	127 15.1W	12	11	1984	0000	100	147	10	24.4	21.1	1000

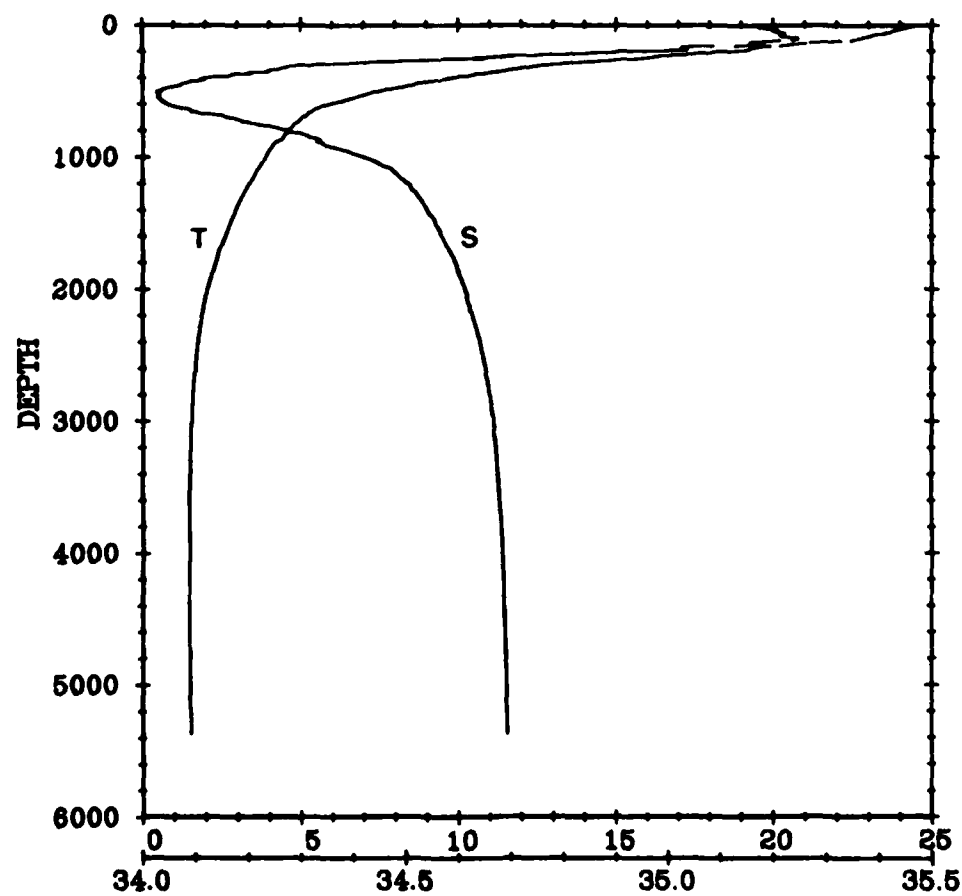
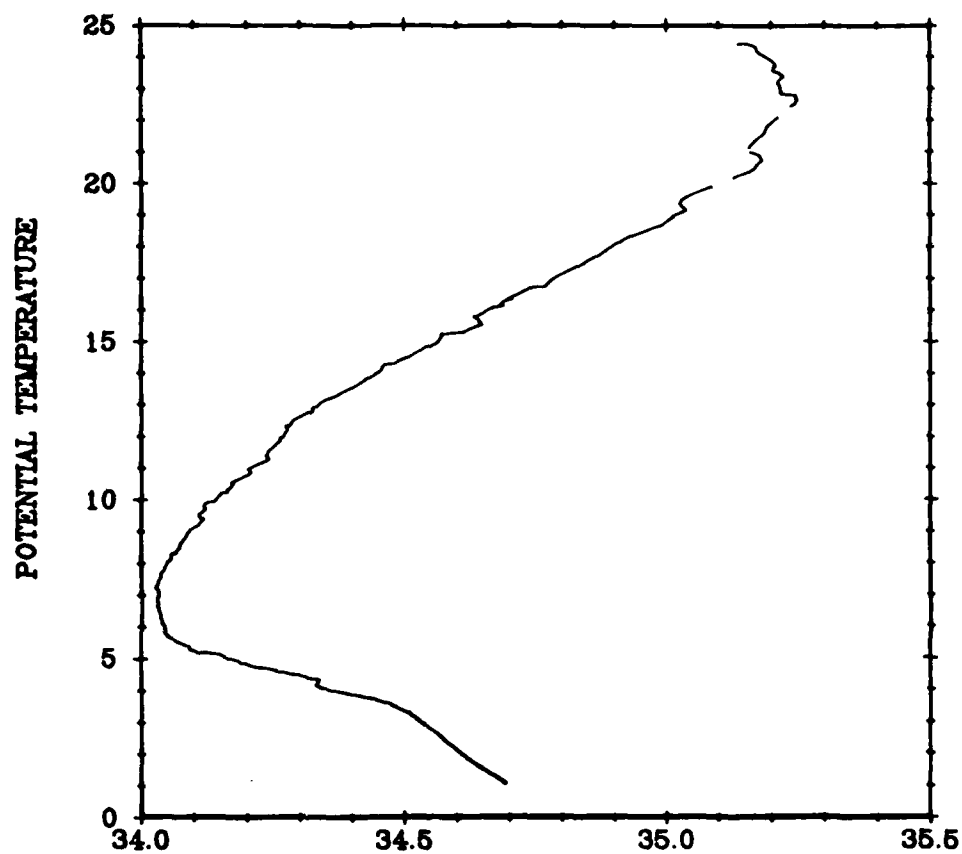
## CCTO DATA

DEPTH	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C						M
1	24.407	35.144	24.407	23.631	31.494	34.921	32.724	1.000	0
2	24.407	35.144	24.407	23.631	31.494	34.921	32.724	1.000	1
3	24.407	35.144	24.407	23.631	31.494	34.921	32.724	1.000	2
4	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	3
5	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	4
6	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	5
7	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	6
8	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	7
9	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	8
10	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	9
11	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	10
12	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	11
13	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	12
14	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	13
15	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	14
16	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	15
17	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	16
18	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	17
19	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	18
20	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	19
21	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	20
22	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	21
23	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	22
24	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	23
25	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	24
26	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	25
27	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	26
28	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	27
29	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	28
30	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	29
31	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	30
32	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	31
33	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	32
34	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	33
35	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	34
36	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	35
37	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	36
38	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	37
39	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	38
40	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	39
41	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	40
42	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	41
43	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	42
44	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	43
45	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	44
46	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	45
47	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	46
48	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	47
49	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	48
50	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	49
51	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	50
52	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	51
53	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	52
54	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	53
55	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	54
56	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	55
57	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	56
58	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	57
59	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	58
60	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	59
61	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	60
62	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	61
63	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	62
64	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	63
65	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	64
66	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	65
67	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	66
68	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	67
69	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	68
70	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	69
71	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	70
72	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	71
73	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	72
74	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	73
75	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	74
76	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	75
77	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	76
78	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	77
79	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	78
80	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	79
81	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	80
82	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	81
83	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	82
84	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	83
85	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	84
86	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	85
87	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	86
88	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	87
89	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	88
90	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	89
91	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	90
92	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	91
93	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	92
94	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	93
95	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	94
96	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	95
97	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	96
98	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	97
99	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	98
100	23.845	35.200	23.857	23.937	31.474	34.912	32.702	1.000	99

## WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	24.421	35.186	4.92	103.2	0.0	0.12	0.0	0.03	24.421	23.658	31.980	39.947	1.0	
2	23.673	35.209	5.00	103.5	0.0	0.11	0.0	0.03	23.661	23.901	32.243	40.229	56	
3	22.366	35.229	4.89	98.9	0.2	0.13	0.0	0.03	22.345	24.296	32.674	40.693	106	
4	19.630	35.250	4.42	85.1	1.2	0.32	2.3	0.06	19.651	24.892	33.352	41.448	156	
5	17.128	34.795	4.50	82.4	2.9	0.43	4.6	0.04	17.093	25.335	33.881	42.357	207	
6	12.537	34.290	5.26	87.6	7.8	0.67	8.5	0.03	12.555	25.911	34.648	42.984	309	
7	9.876	34.119	4.36	63.4	20.3	1.31	17.9	0.02						

# MARATHON 2 STA. 15



NEW THRUWASH WASHINGTON PARATHUN DEC 11 STATION 15

LATITUDE LONGITUDE MO. DY. YR. START TIME WIND WIND SPEED AIR TEMP WET BULB HALO M  
25 15 4N 1 15 4W 1 9 94 374 122 11 11 21 21 21 21 21

# WTD DATA

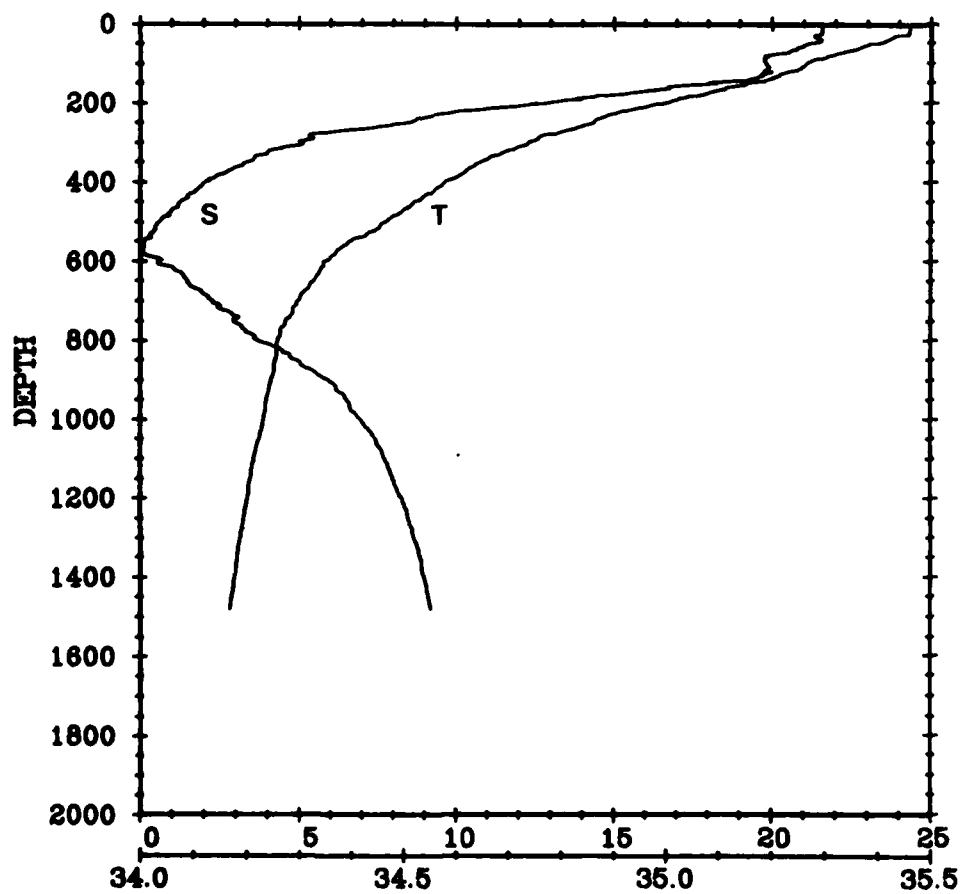
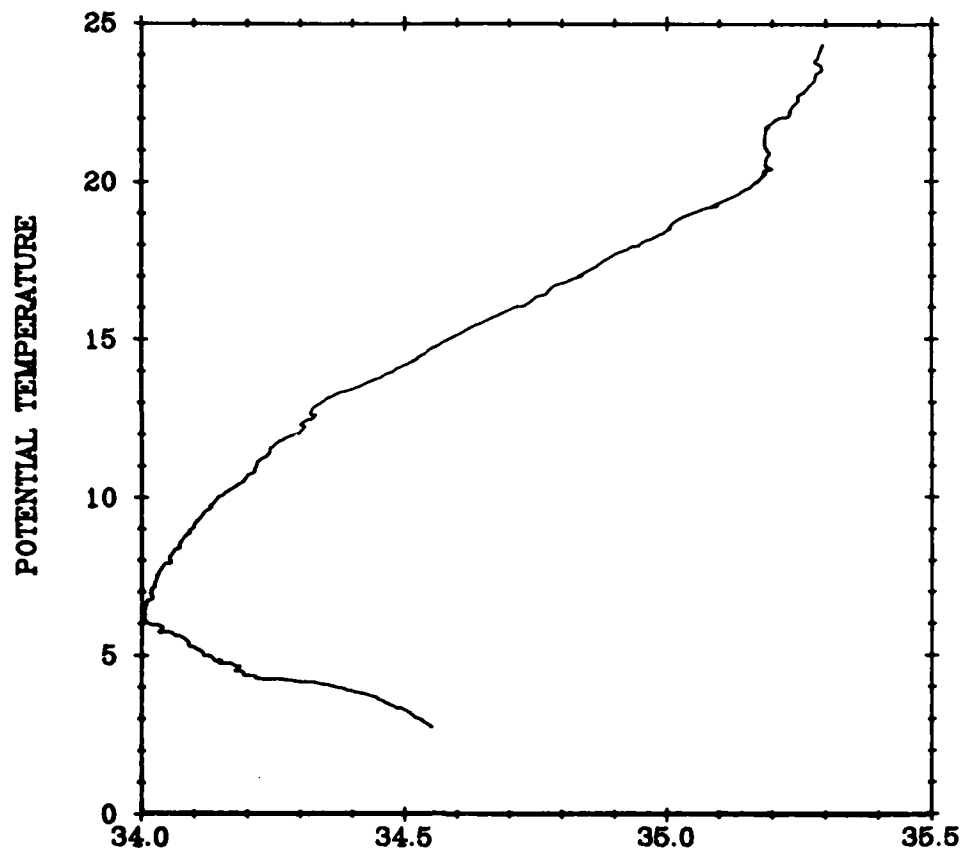
DEPTH	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC	ST	DEPTH
DB	DEC 1		DEC 1				11 11 N			
21	24.114	35.244	24.114	21.111	12.115	40.116	40.116			21
21	24.117	35.241	24.115	21.116	12.112	40.111	40.112			21
40	40.114	35.244	20.115	21.115	12.110	40.110	40.110			40
60	42.111	35.211	24.118	24.115	12.114	40.114	40.114			60
80	41.111	35.211	21.111	24.111	12.114	40.114	40.114			80
100	21.119	35.189	21.114	24.111	12.111	40.111	40.111			100
120	19.111	35.141	19.111	20.111	11.111	40.111	40.111			120
140	16.111	34.111	16.111	20.111	11.111	40.111	40.111			140
160	14.111	34.111	14.111	20.111	11.111	40.111	40.111			160
180	12.111	34.111	12.111	20.111	11.111	40.111	40.111			180
200	10.111	34.111	10.111	20.111	11.111	40.111	40.111			200
220	8.111	34.111	8.111	20.111	11.111	40.111	40.111			220
240	6.111	34.111	6.111	20.111	11.111	40.111	40.111			240
260	4.111	34.111	4.111	20.111	11.111	40.111	40.111			260
280	2.111	34.111	2.111	20.111	11.111	40.111	40.111			280
300	0.111	34.111	0.111	20.111	11.111	40.111	40.111			300
320	0.111	34.111	0.111	20.111	11.111	40.111	40.111			320
340	0.111	34.111	0.111	20.111	11.111	40.111	40.111			340
360	0.111	34.111	0.111	20.111	11.111	40.111	40.111			360
380	0.111	34.111	0.111	20.111	11.111	40.111	40.111			380
400	0.111	34.111	0.111	20.111	11.111	40.111	40.111			400
420	0.111	34.111	0.111	20.111	11.111	40.111	40.111			420
440	0.111	34.111	0.111	20.111	11.111	40.111	40.111			440
460	0.111	34.111	0.111	20.111	11.111	40.111	40.111			460
480	0.111	34.111	0.111	20.111	11.111	40.111	40.111			480
500	0.111	34.111	0.111	20.111	11.111	40.111	40.111			500
520	0.111	34.111	0.111	20.111	11.111	40.111	40.111			520
540	0.111	34.111	0.111	20.111	11.111	40.111	40.111			540
560	0.111	34.111	0.111	20.111	11.111	40.111	40.111			560
580	0.111	34.111	0.111	20.111	11.111	40.111	40.111			580
600	0.111	34.111	0.111	20.111	11.111	40.111	40.111			600
620	0.111	34.111	0.111	20.111	11.111	40.111	40.111			620
640	0.111	34.111	0.111	20.111	11.111	40.111	40.111			640
660	0.111	34.111	0.111	20.111	11.111	40.111	40.111			660
680	0.111	34.111	0.111	20.111	11.111	40.111	40.111			680
700	0.111	34.111	0.111	20.111	11.111	40.111	40.111			700
720	0.111	34.111	0.111	20.111	11.111	40.111	40.111			720
740	0.111	34.111	0.111	20.111	11.111	40.111	40.111			740
760	0.111	34.111	0.111	20.111	11.111	40.111	40.111			760
780	0.111	34.111	0.111	20.111	11.111	40.111	40.111			780
800	0.111	34.111	0.111	20.111	11.111	40.111	40.111			800
820	0.111	34.111	0.111	20.111	11.111	40.111	40.111			820
840	0.111	34.111	0.111	20.111	11.111	40.111	40.111			840
860	0.111	34.111	0.111	20.111	11.111	40.111	40.111			860
880	0.111	34.111	0.111	20.111	11.111	40.111	40.111			880
900	0.111	34.111	0.111	20.111	11.111	40.111	40.111			900
920	0.111	34.111	0.111	20.111	11.111	40.111	40.111			920
940	0.111	34.111	0.111	20.111	11.111	40.111	40.111			940
960	0.111	34.111	0.111	20.111	11.111	40.111	40.111			960
980	0.111	34.111	0.111	20.111	11.111	40.111	40.111			980
1000	0.111	34.111	0.111	20.111	11.111	40.111	40.111			1000

# WISKIN BUTTE DATA

DEPTH	TEMP	SALINITY	DB	TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEC 1		M	DEC 1				DB
21	24.114	35.244	4.112	112.111	2.111	11.111	11.111	21
40	40.114	35.244	4.112	112.111	2.111	11.111	11.111	40
60	42.111	35.211	4.112	112.111	2.111	11.111	11.111	60
80	41.111	35.211	4.112	112.111	2.111	11.111	11.111	80
100	21.119	35.189	4.112	112.111	2.111	11.111	11.111	100
120	19.111	35.141	4.112	112.111	2.111	11.111	11.111	120
140	16.111	34.111	4.112	112.111	2.111	11.111	11.111	140
160	14.111	34.111	4.112	112.111	2.111	11.111	11.111	160
180	12.111	34.111	4.112	112.111	2.111	11.111	11.111	180
200	10.111	34.111	4.112	112.111	2.111	11.111	11.111	200
220	8.111	34.111	4.112	112.111	2.111	11.111	11.111	220
240	6.111	34.111	4.112	112.111	2.111	11.111	11.111	240
260	4.111	34.111	4.112	112.111	2.111	11.111	11.111	260
280	2.111	34.111	4.112	112.111	2.111	11.111	11.111	280
300	0.111	34.111	4.112	112.111	2.111	11.111	11.111	300
320	0.111	34.111	4.112	112.111	2.111	11.111	11.111	320
340	0.111	34.111	4.112	112.111	2.111	11.111	11.111	340
360	0.111	34.111	4.112	112.111	2.111	11.111	11.111	360
380	0.111	34.111	4.112	112.111	2.111	11.111	11.111	380
400	0.111	34.111	4.112	112.111	2.111	11.111	11.111	400
420	0.111	34.111	4.112	112.111	2.111	11.111	11.111	420
440	0.111	34.111	4.112	112.111	2.111	11.111	11.111	440
460	0.111	34.111	4.112	112.111	2.111	11.111	11.111	460
480	0.111	34.111	4.112	112.111	2.111	11.111	11.111	480
500	0.111	34.111	4.112	112.111	2.111	11.111	11.111	500
520	0.111	34.111	4.112	112.111	2.111	11.111	11.111	520
540	0.111	34.111	4.112	112.111	2.111	11.111	11.111	540
560	0.111	34.111	4.112	112.111	2.111	11.111	11.111	560
580	0.111	34.111	4.112	112.111	2.111	11.111	11.111	580
600	0.111	34.111	4.112	112.111	2.111	11.111	11.111	600
620	0.111	34.111	4.112	112.111	2.111	11.111	11.111	620
640	0.111	34.111	4.112	112.111	2.111	11.111	11.111	640
660	0.111	34.111	4.112	112.111	2.111	11.111	11.111	660
680	0.111	34.111	4.112	112.111	2.111	11.111	11.111	680
700	0.111	34.111	4.112	112.111	2.111	11.111	11.111	700
720	0.111	34.111	4.112	112.111	2.111	11.111	11.111	720
740	0.111	34.111	4.112	112.111	2.111	11.111	11.111	740
760	0.111	34.111	4.112	112.111	2.111	11.111	11.111	760
780	0.111	34.111	4.112	112.111	2.111	11.111	11.111	780
800	0.111	34.111	4.112	112.111	2.111	11.111	11.111	800
820	0.111	34.111	4.112	112.111	2.111	11.111	11.111	820
840	0.111	34.111	4.112	112.111	2.111	11.111	11.111	840
860	0.111	34.111	4.112	112.111	2.111	11.111	11.111	860
880	0.111	34.111	4.112	112.111	2.111	11.111	11.111	880
900	0.111	34.111	4.112	112.111	2.111	11.111	11.111	900
920	0.111	34.111	4.112	112.111	2.111	11.111	11.111	920
940	0.111	34.111	4.112	112.111	2.111	11.111	11.111	940
960	0.111	34.111	4.112	112.111	2.111	11.111	11.111	960
980	0.111	34.111	4.112	112.111	2.111	11.111	11.111	980
1000	0.111	34.111	4.112	112.111	2.111	11.111	11.111	1000



# MARATHON 2 STA. 16

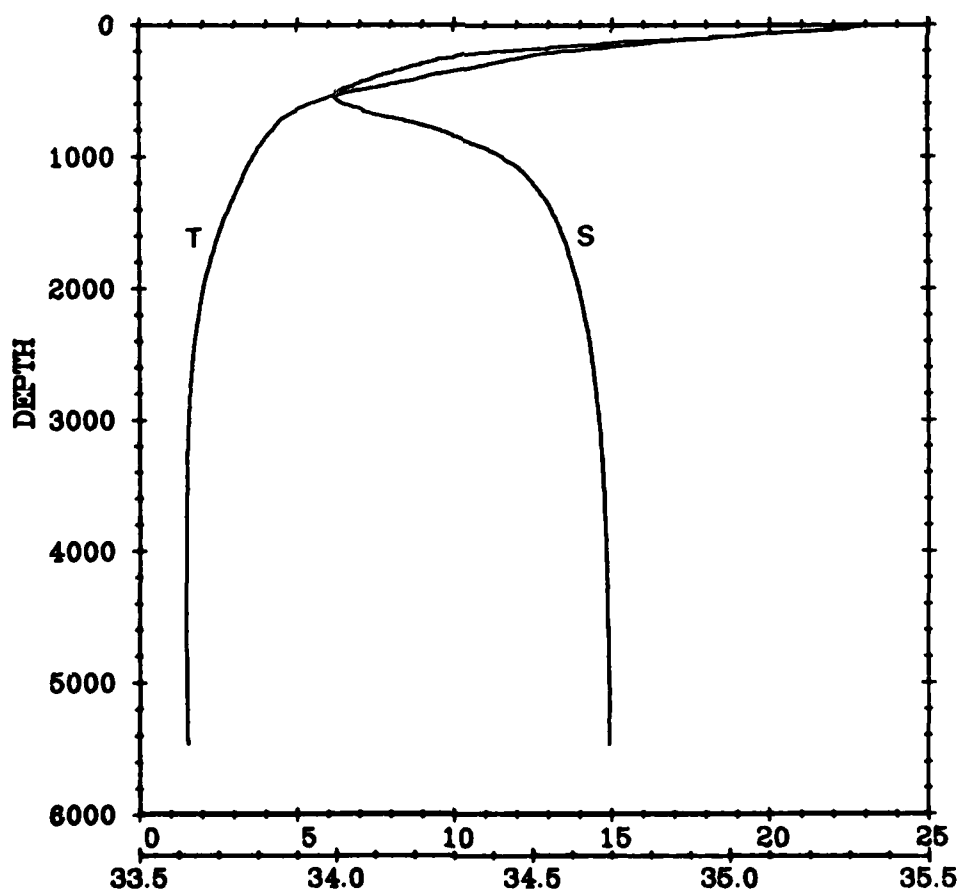
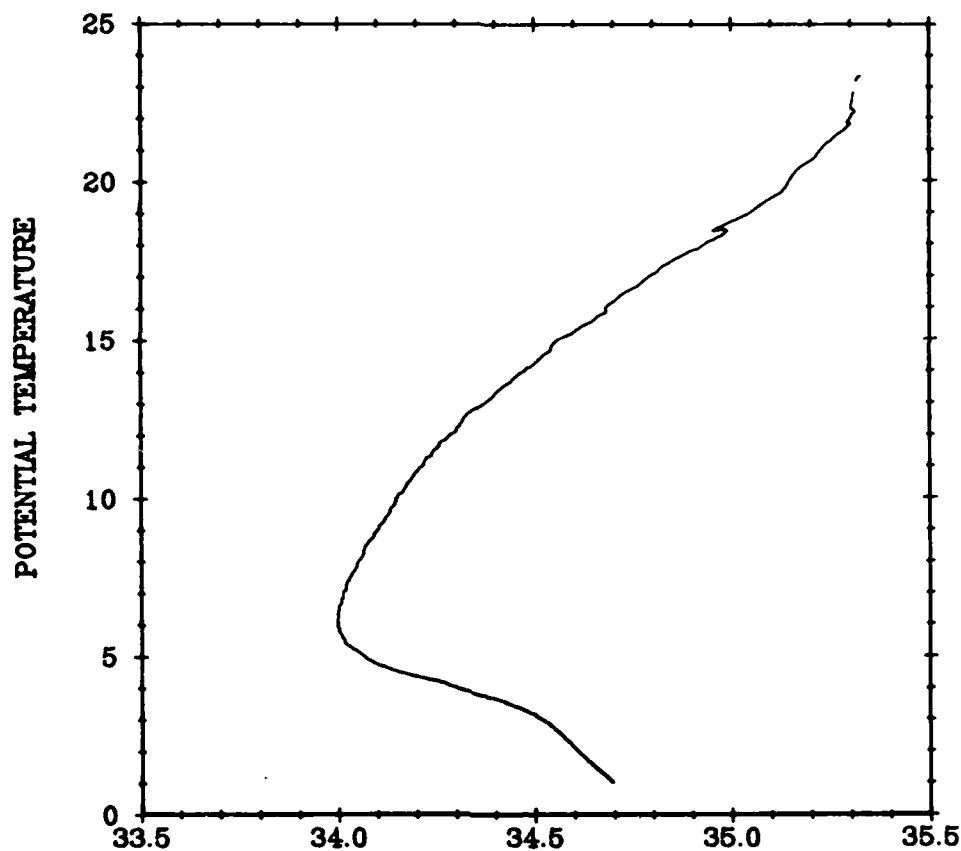


LATITUDE	LONGITUDE	NO. BY YR.	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
24 19 24 N	152 17 17 W	10 4984	1454	1493	110	9	22.3	17.1	1026.4

STD DATA									
PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CGR		M
10	21.249	34.104	21.249	24.109	12.470	11.465	379.924	1.113	1
20	21.259	34.104	21.259	24.109	12.470	11.465	379.924	1.113	1
30	21.269	34.104	21.269	24.109	12.470	11.465	379.924	1.113	1
40	21.279	34.104	21.279	24.109	12.470	11.465	379.924	1.113	1
50	21.289	34.104	21.289	24.109	12.470	11.465	379.924	1.113	1
60	21.299	34.104	21.299	24.109	12.470	11.465	379.924	1.113	1
70	21.309	34.104	21.309	24.109	12.470	11.465	379.924	1.113	1
80	21.319	34.104	21.319	24.109	12.470	11.465	379.924	1.113	1
90	21.329	34.104	21.329	24.109	12.470	11.465	379.924	1.113	1
100	21.339	34.104	21.339	24.109	12.470	11.465	379.924	1.113	1
110	21.349	34.104	21.349	24.109	12.470	11.465	379.924	1.113	1
120	21.359	34.104	21.359	24.109	12.470	11.465	379.924	1.113	1
130	21.369	34.104	21.369	24.109	12.470	11.465	379.924	1.113	1
140	21.379	34.104	21.379	24.109	12.470	11.465	379.924	1.113	1
150	21.389	34.104	21.389	24.109	12.470	11.465	379.924	1.113	1
160	21.399	34.104	21.399	24.109	12.470	11.465	379.924	1.113	1
170	21.409	34.104	21.409	24.109	12.470	11.465	379.924	1.113	1
180	21.419	34.104	21.419	24.109	12.470	11.465	379.924	1.113	1
190	21.429	34.104	21.429	24.109	12.470	11.465	379.924	1.113	1
200	21.439	34.104	21.439	24.109	12.470	11.465	379.924	1.113	1
210	21.449	34.104	21.449	24.109	12.470	11.465	379.924	1.113	1
220	21.459	34.104	21.459	24.109	12.470	11.465	379.924	1.113	1
230	21.469	34.104	21.469	24.109	12.470	11.465	379.924	1.113	1
240	21.479	34.104	21.479	24.109	12.470	11.465	379.924	1.113	1
250	21.489	34.104	21.489	24.109	12.470	11.465	379.924	1.113	1
260	21.499	34.104	21.499	24.109	12.470	11.465	379.924	1.113	1
270	21.509	34.104	21.509	24.109	12.470	11.465	379.924	1.113	1
280	21.519	34.104	21.519	24.109	12.470	11.465	379.924	1.113	1
290	21.529	34.104	21.529	24.109	12.470	11.465	379.924	1.113	1
300	21.539	34.104	21.539	24.109	12.470	11.465	379.924	1.113	1
310	21.549	34.104	21.549	24.109	12.470	11.465	379.924	1.113	1
320	21.559	34.104	21.559	24.109	12.470	11.465	379.924	1.113	1
330	21.569	34.104	21.569	24.109	12.470	11.465	379.924	1.113	1
340	21.579	34.104	21.579	24.109	12.470	11.465	379.924	1.113	1
350	21.589	34.104	21.589	24.109	12.470	11.465	379.924	1.113	1
360	21.599	34.104	21.599	24.109	12.470	11.465	379.924	1.113	1
370	21.609	34.104	21.609	24.109	12.470	11.465	379.924	1.113	1
380	21.619	34.104	21.619	24.109	12.470	11.465	379.924	1.113	1
390	21.629	34.104	21.629	24.109	12.470	11.465	379.924	1.113	1
400	21.639	34.104	21.639	24.109	12.470	11.465	379.924	1.113	1
410	21.649	34.104	21.649	24.109	12.470	11.465	379.924	1.113	1
420	21.659	34.104	21.659	24.109	12.470	11.465	379.924	1.113	1
430	21.669	34.104	21.669	24.109	12.470	11.465	379.924	1.113	1
440	21.679	34.104	21.679	24.109	12.470	11.465	379.924	1.113	1
450	21.689	34.104	21.689	24.109	12.470	11.465	379.924	1.113	1
460	21.699	34.104	21.699	24.109	12.470	11.465	379.924	1.113	1
470	21.709	34.104	21.709	24.109	12.470	11.465	379.924	1.113	1
480	21.719	34.104	21.719	24.109	12.470	11.465	379.924	1.113	1
490	21.729	34.104	21.729	24.109	12.470	11.465	379.924	1.113	1
500	21.739	34.104	21.739	24.109	12.470	11.465	379.924	1.113	1
510	21.749	34.104	21.749	24.109	12.470	11.465	379.924	1.113	1
520	21.759	34.104	21.759	24.109	12.470	11.465	379.924	1.113	1
530	21.769	34.104	21.769	24.109	12.470	11.465	379.924	1.113	1
540	21.779	34.104	21.779	24.109	12.470	11.465	379.924	1.113	1
550	21.789	34.104	21.789	24.109	12.470	11.465	379.924	1.113	1
560	21.799	34.104	21.799	24.109	12.470	11.465	379.924	1.113	1
570	21.809	34.104	21.809	24.109	12.470	11.465	379.924	1.113	1
580	21.819	34.104	21.819	24.109	12.470	11.465	379.924	1.113	1
590	21.829	34.104	21.829	24.109	12.470	11.465	379.924	1.113	1
600	21.839	34.104	21.839	24.109	12.470	11.465	379.924	1.113	1
610	21.849	34.104	21.849	24.109	12.470	11.465	379.924	1.113	1
620	21.859	34.104	21.859	24.109	12.470	11.465	379.924	1.113	1
630	21.869	34.104	21.869	24.109	12.470	11.465	379.924	1.113	1
640	21.879	34.104	21.879	24.109	12.470	11.465	379.924	1.113	1
650	21.889	34.104	21.889	24.109	12.470	11.465	379.924	1.113	1
660	21.899	34.104	21.899	24.109	12.470	11.465	379.924	1.113	1
670	21.909	34.104	21.909	24.109	12.470	11.465	379.924	1.113	1
680	21.919	34.104	21.919	24.109	12.470	11.465	379.924	1.113	1
690	21.929	34.104	21.929	24.109	12.470	11.465	379.924	1.113	1
700	21.939	34.104	21.939	24.109	12.470	11.465	379.924	1.113	1
710	21.949	34.104	21.949	24.109	12.470	11.465	379.924	1.113	1
720	21.959	34.104	21.959	24.109	12.470	11.465	379.924	1.113	1
730	21.969	34.104	21.969	24.109	12.470	11.465	379.924	1.113	1
740	21.979	34.104	21.979	24.109	12.470	11.465	379.924	1.113	1
750	21.989	34.104	21.989	24.109	12.470	11.465	379.924	1.113	1
760	21.999	34.104	21.999	24.109	12.470	11.465	379.924	1.113	1
770	22.009	34.104	22.009	24.109	12.470	11.465	379.924	1.113	1
780	22.019	34.104	22.019	24.109	12.470	11.465	379.924	1.113	1
790	22.029	34.104	22.029	24.109	12.470	11.465	379.924	1.113	1
800	22.039	34.104	22.039	24.109	12.470	11.465	379.924	1.113	1
810	22.049	34.104	22.049	24.109	12.470	11.465	379.924	1.113	1
820	22.059	34.104	22.059	24.109	12.470	11.465	379.924	1.113	1
830	22.069	34.104	22.069	24.109	12.470	11.465	379.924	1.113	1
840	22.079	34.104	22.079	24.109	12.470	11.465	379.924	1.113	1
850	22.089	34.104	22.089	24.109	12.470	11.465	379.924	1.113	1
860	22.099	34.104	22.099	24.109	12.470	11.465	379.924	1.113	1
870	22.109	34.104	22.109	24.109	12.470	11.465	379.924	1.113	1
880	22.119	34.104	22.119	24.109	12.470	11.465	379.924	1.113	1
890	22.129	34.104	22.129	24.109	12.470	11.465	379.924	1.113	1
900	22.139	34.104	22.139	24.109	12.470	11.465	379.924	1.113	1
910	22.149	34.104	22.149	24.109	12.470	11.465	379.924	1.113	1
920	22.159	34.104	22.159	24.109	12.470	11.465	379.924	1.113	1
930	22.169	34.104	22.169	24.109	12.470	11.465	379.924	1.113	1
940	22.179	34.104	22.179	24.109	12.470	11.465	379.924	1.113	1
950	22.189	34.104	22.189	24.109	12.470	11.465	379.924	1.113	1
960	22.199	34.104	22.199	24.109	12.470	11.465	379.924	1.113	1
970	22.209	34.104	22.209	24.109	12.470	11.465	379.924	1.113	1
980	22.219	34.104	22.219	24.109	12.470	11.465	379.924	1.113	1
990	22.229	34.104	22.229	24.109	12.470	11.465	379.924	1.113	1
1000	22.239	34.104	22.239	24.109	12.470	11.465	379.924	1.113	1

NICKEN BOTTLE DATA													
DEPTH	TEMP	SALINITY	DIST	02 SAT	SIGMA	P04	N01	N02	TRIT	POT TEMP	SIGMA	SIGMA	PRESS
M	DEG C		ML L	%	UM L	UM L	UM L	UM L	TUBIN	DEG C			DB
1	21.249	34.104	5.03	101.5	12.470	11.465	0.0	0.0	23.270	24.102	32.453	40.448	
5	21.259	34.104	4.46	104.4	12.470	11.465	0.0	0.0	24.264	24.613	32.288	41.276	56
10	21.269	34.104	4.40	107.3	12.470	11.465	0.0	0.0	25.258	25.271	31.713	41.857	107
15	21.279	34.104	3.83	110.4	12.470	11.465	0.0	0.0	26.252	25.876	31.154	42.130	157
20	21.289	34.104	3.14	113.6	12.470	11.465	0.0	0.0	27.246	26.525	30.443	42.788	207
25	21.299	34.104	2.45	116.8	12.470	11.465	0.0	0.0	28.240	27.199	29.704	43.129	257
30	21.309	34.104	1.76	120.0	12.470	11.465	0.0	0.0	29.234	27.858	28.999	43.764	307
35	21.319	34.104	1.07	123.2	12.470	11.465	0.0	0.0	30.228	28.517	28.300	44.150	357
40	21.329	34.104	0.38	126.4	12.470	11.465	0.0	0.0	31.222	29.176	27.605	44.533	407
45	21.339	34.104	0.09	129.6	12.470	11.465	0.0	0.0	32.216	29.835	26.910	44.916	457
50	21.349	34.104	0.00	132.8	12.470	11.465	0.0	0.0	33.210	30.494	26.215	45.299	507
55	21.359	34.104	0.00	136.0	12.470	11.465	0.0	0.0	34.204	31.153	25.520	45.682	557
60	21.369	34.104	0.00	139.2	12.470	11.465	0.0	0.0	35.198	31.812	24.825	46.065	607
65	21.379	34.104	0.00	142.4	12.470	11.465	0.0	0.0	36.192	32.471	24.130	46.448	657
70	21.389	34.104	0.00	145.6	12.470	11.465	0.0	0.0	37.186	33.130	23.435	46.831	707
75	21.399	34.104	0.00	148.8	12.470	11.465	0.0	0.0	38.180	33.789	22.740	47.214	757
80	21.409	34.104	0.00	152.0	12.470	11.465	0.0	0.0	39.174	34.448	22.045	47.597	807
85	21.419	34.104	0.00	155.2	12.470	11.465	0.0	0.0	40.168	35.107	21.350	47.980	857
90	21.429	34.104	0.00	158.4	12.470	11.465	0.0	0.0	41.162	35.766	20.655	48.363	907
95	21.439	34.104	0.00	161.6	12.470	11.465	0.0	0.0	42.156	36.425	19.960	48.746	957
100	21.449	34.104	0.00	164.8	12.470	11.465	0.0	0.0	43.150	37.084	19.265	49.129	1007
105	21.459	34.104	0.00	168.0	12.470	11.465	0.0	0.0	44.144	37.743	18.570	49.512	1057
110	21.469	34.104	0.00	171.2	12.470	11.465	0.0	0.0	45.138	38.402	17.875	49.895	1107
115	21.479	34.104	0.00	174.4	12.470	11.465	0.0	0.0	46.132	39.061	17.180	50.278	1157
120	21.489	34.104	0.00	177.6	12.470	11.465	0.0	0.0	47.126	39.720	16.485	50.661	1207
125	21.499	34.104	0.00	180.8	12.470	11.465	0.0	0.0	48.120	40.379	15.790	51.044	1257
130	21.509	34.104	0.00	184.0	12.470	11.465	0.0	0.0	49.114	41.038	15.095	51.427	1307
135	21.519	34.104	0.00	187.2	12.470	11.465	0.0	0.0	50.108	41.697	14.400	51.810	1357
140	21.529	34.104	0.00	190.4	12.470	11.465	0.0	0.0	51.102	42.356	13.705	52.193	1407
145	21.539	34.104	0.00	193.6	12.470	11.465	0.0	0.0	52.096	43.015	13.010	52.576	1457
150	21.549	34.104	0.00	196.8	12.470	11.465	0.0	0.0	53.090	43.674	12.315	52.959	1507
155	21.559	34.104	0.00	200.0	12.470	11.465	0.0	0.0	54.084	44.333	11.620	53.342	1557
160	21.569	34.104	0.00	203.2	12.470	11.465	0.0	0.0	55.078	44.992	10.925	53.725	1607
165	21.579	34.104	0.00	206.4	12.470	11.465	0.0	0.0	56.072	45.651	10.230	54.108	1657
170	21.589	34.104	0.00	209.6	12.470	11.465	0.0	0.0	57.066	46.310	9.535	54.491	1707
175	21.599	34.104	0.00	212.8	12.470	11.465	0.0	0.0	58.060	46.969	8.840	54.874	1757
180	21.609	34.104	0.00	216.0	12.470	11.465	0.0	0.0	59.054	47.628	8.145	55.257	1807
185	21.619	34.104	0.00	219.2	12.470	11.465	0.0	0.0	60.048	48.287	7.450	55.640	1857
190	21.629	34.104	0.00	222.4	12.470	11.465	0.0	0.0	61.042	48.946	6.755	56.023	1907
195	21.639	34.104	0.00	225.6	12.470	11.465	0.0	0.0	62.036	49.605	6.060	56.406	1957
200	21.649	34.104	0.00	228.8	12.470	11.465	0.0	0.0	63.030	50.264	5.365	56.789	2007
205	21.659	34.104	0.00	232.0	12.470	11.465	0.0	0.0	64.024	50.923	4.670	57.172	2057
210	21.669	34.104	0.00	235.2	12.470	11.465	0.0	0.0	65.018	51.582	3.975	57.555	2107
215	21.679	34.104	0.00	238.4	12.470	11.465	0.0	0.0	66.012	52.241	3.280	57.938	2157
220	21.689	34.104	0.00	241.6	12.470	11.465	0.0	0.0	67.006	52.900	2.585	58.321	2207
225	21.699	34.104	0.00	244.8	12.470	11.465	0.0	0.0	68.000	53.559	1.890	58.704	2257
230	21.709	34.104	0.00	248.0	12.470	11.465	0.0	0.0	68.994	54.218	1.195	59.087	2307
235	21.719	34.104	0.00	251.2	12.470	11.465	0.0	0.0	69.988	54.877	0.500	59.470	2357
240	21.729	34.104	0.00	254.4	12.470	11.465	0.0	0.0	70.982	55.536	-0.195	59.853	2407
245	21.739	34.104	0.00	257.6	12.470	11.465	0.0	0.0	71.976	56.195	-0.890	60.236	2457
250	21.749	34.104	0.00	260.8	12.470	11.465	0.0	0.0	72.970	56.854	-1.595	60.619	2507
255	21.759	34.104	0.00	264.0	12.470	11.465	0.0	0.0	73.964	57.513	-2.290	61.002	2557
260	21.769	34.104	0.00	267.2	12.470	11.465	0.0	0.0	74.958	58.172	-2.995	61.385	2607
265	21.779	34.104	0.00	270.4	12.470	11.465	0.0	0.0	75.952	58.831	-3.690	61.768	2657
270	21.789	34.104	0.00	273.6	12.470	11.465	0.0	0.0	76.946	59.490	-4.395	62.151	2707
275	21.799	34.104	0.00	276.8	12.470	11.465	0.0	0.0	77.940	60.149	-5.090	62.534	2757
280	21.809	34.104	0.00	280.0	12.470	11.465	0.0	0.0	78.934	60.808	-5.795	62.917	2807
285	21.819	34.104	0.00	283.2	12.470	11.465	0.0	0.0	79.928	61.467	-6.490	63.300	2857
290	21.829	34.104	0.00	286.4	12.470	11.465	0.0	0.0	80.922	62.126	-7.195	63.683	2907
295	21.839	34.104	0.00	289.6	12.470	11.465	0.0	0.0	81.916	62.785	-7.890	64.066	2957
300	21.849	34.104	0.00	292.8	12.470	11.465	0.0	0.0	82.910	63.444	-8.595	64.449	3007
305	21.859	34.104	0.00	296.0	12.470	11.465	0.0	0.0	83.904	64.103	-9.290	64.832	3057
310	21.869	34.104	0.00	299.2	12.470	11.465	0.0	0.0	84.898	64.762	-9.995	65.215	3107
315	21.879	34.104	0.00	302.4	12.470	11.465	0.0	0.0	85.892	65.421	-10.690	65.598	3157
320	21.889	34.104	0.00	305.6	12.470	11.465	0.0	0.0	86.886	66.080	-11.395	65.981	3207
325	21.899	34.104	0.00	308.8	12.470	11.465	0.0	0.0	87.880	66.739	-12.090	66.364	3257
330	21.909	34.104	0.00	312.0	12.470	11.465	0.0	0.0	88.874	67.398	-12.795	66.747	3307
335	21.919	34.104	0.00	315.2	12.470	11.465	0.0	0.0	89.868	68.057	-13.490	67.130	3357
340	21.929	34.104	0.00	318.4	12.470	11.465	0.0	0.0	90.862	68.716	-14.195	67.513	3407
345	21.939	34.104	0.00	321.6	12.470	11.465	0.0	0.0	91.856	69.375	-14.890	67.896	3457
350	21.949	34.104	0.00	324.8	12.470	11.465	0.0	0.0	92.850	70.034	-15.595	68.279	3507
355	21.959	34.104	0.00	328.0	12.470	11.465	0.0	0.0	93.844	70.693	-16.290	68.662	3557
360	21.969	34.104	0.00	331.2	12.470	11.465	0.0	0.0	94.838	71.352	-16.995	69.045	3607
365	21.979	34.104	0.00	334.4	12.470	11.465	0.0	0.0	95.832	72.011	-17.690	69.428	3657
370	21.989	34.104	0.00	337.6	12.470	11.465	0.0	0.0	96.826	72.670	-18.395	69.811	3707
375	21.999	34.104	0.00	340.8	12.470	11.465	0.0	0.0	97.820	73.329	-19.090	70.194	3757
380	22.009	34.104	0.00	344.0	12.470	11.465	0.0	0.0	98.814	73.988	-19.795	70.577	3807
385	22.019	34.104	0.00	347.2	12.470	11.465	0.0	0.0	99.808	74.647	-20.490	70.960	3857
390	22.029	34.104	0.00	350.4	12.470	11.465	0.0	0.0	100.802	75.306	-21.195	71.343	3907
395	22.039	34.104	0.00	353.6	12.470	11.465	0.0	0.0	101.796	75.965	-21.890	71.726	3957
400	22.049	34.104	0.00	356.8	12.470	11.465	0.0	0.0	102.790	76.624	-22.595	72.109	4007
405	22.059	34.104	0.00	360.0	12.470	11.465	0.0	0.0	103.784	77.283	-23.290	72.492	4057
410	22.069	34.104	0.00	363.2	12.470	11.465	0.0	0.0	104.778	77.942	-23.995	72.875	4107
415	22.079	34.104	0.00	366.4	12.470	11.465	0.0	0.0	105.772	78.601	-24.690	73.258	4157
420	22.089	34.104	0.00	369.6	12.470	11.465	0.0	0.0	106.766	79.260	-25.395	73.641	4207

# MARATHON 2 STA. 17



LATITUDE	LONGITUDE	MO	DAY	YEAR	START TIME	BOTT M	WIND	SPEED	AIR TEMP	WET WIND	BAROM
17 27 N	152 40 W	4	9	84	2054	119	147	12	24.4	21.1	1024.0

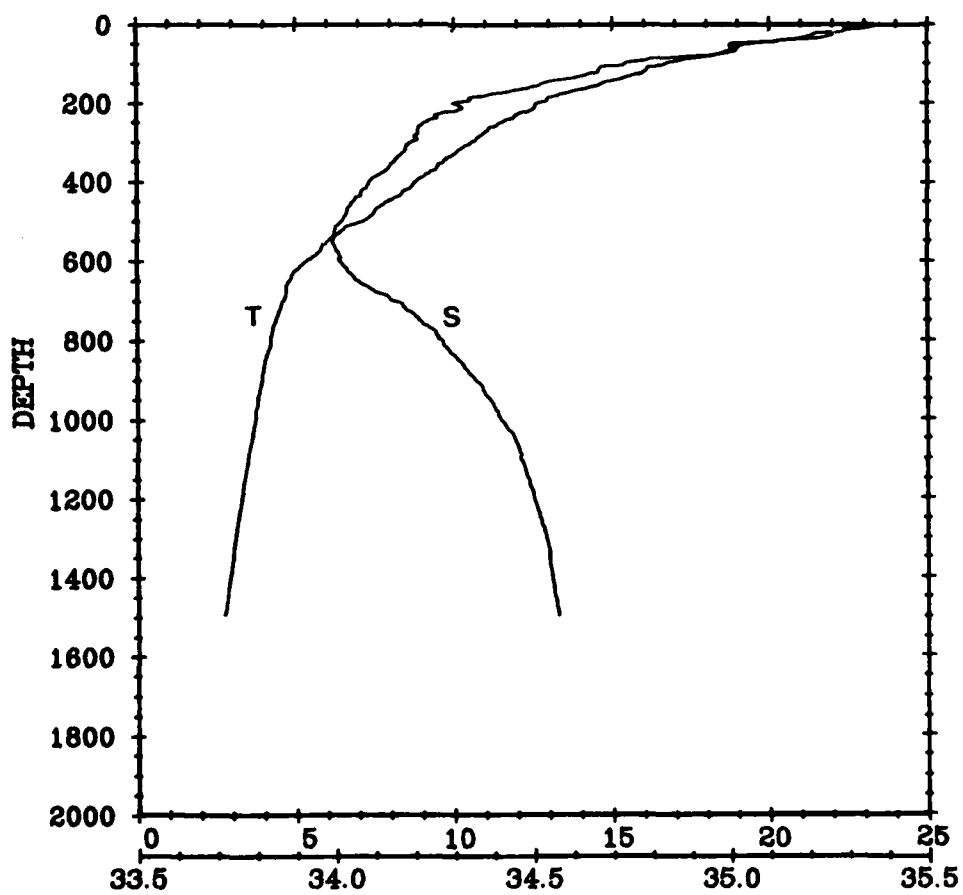
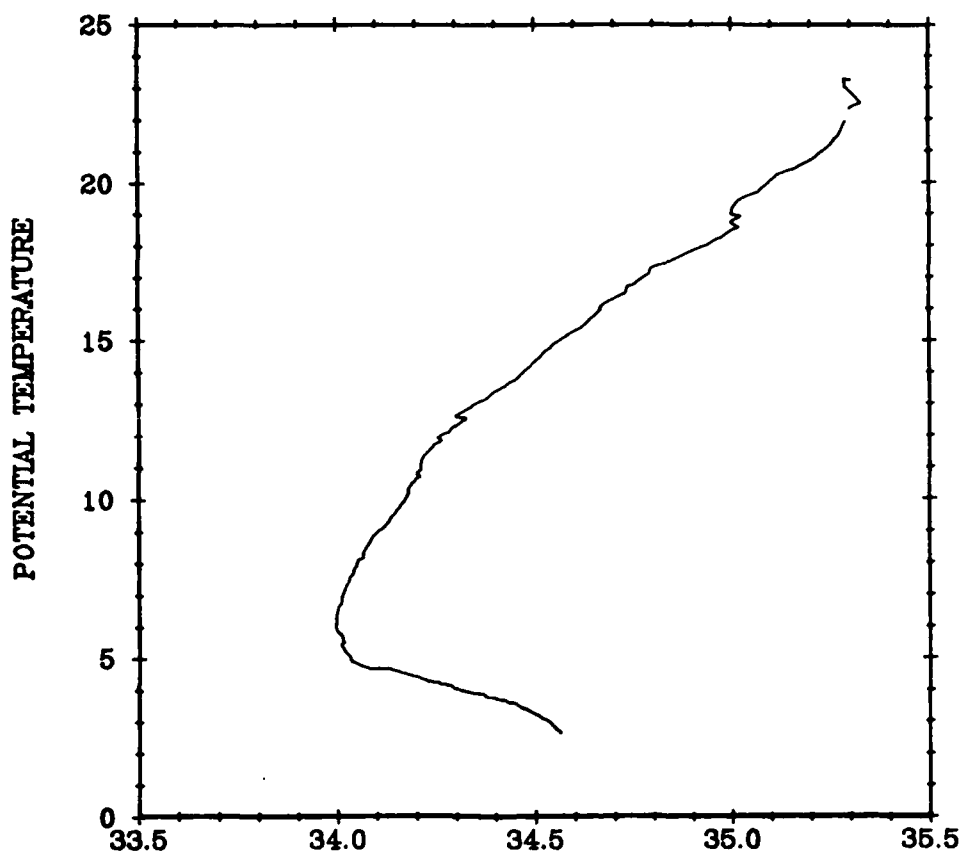
## WTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM TON		M
2	21.144	34.192	21.154	24.112	32.467	40.465	179.332	1.100	0
10	21.143	34.193	21.139	24.448	32.339	40.357	343.105	1.113	10
20	21.443	34.185	21.437	24.763	33.201	41.272	519.682	1.139	20
30	21.443	34.185	21.443	25.144	33.126	41.643	292.819	1.201	30
40	21.443	34.185	21.443	25.217	33.102	41.819	275.977	1.259	40
50	21.443	34.185	21.443	25.191	33.112	42.141	260.915	1.311	50
60	21.443	34.185	21.443	25.164	33.112	42.573	244.761	1.435	60
70	21.443	34.185	21.443	25.138	33.112	43.055	212.225	1.547	70
80	21.443	34.185	21.443	25.112	33.112	43.225	197.446	1.649	80
90	21.443	34.185	21.443	25.086	33.112	43.447	184.673	1.745	90
100	21.443	34.185	21.443	25.060	33.112	43.643	173.222	1.834	100
110	21.443	34.185	21.443	25.034	33.112	43.819	165.430	1.919	110
120	21.443	34.185	21.443	25.008	33.112	44.019	159.402	1.100	120
130	21.443	34.185	21.443	24.982	33.112	44.241	147.915	1.176	130
140	21.443	34.185	21.443	24.956	33.112	44.525	126.247	1.213	140
150	21.443	34.185	21.443	24.930	33.112	44.793	107.819	1.330	150
160	21.443	34.185	21.443	24.904	33.112	45.072	94.913	1.431	160
170	21.443	34.185	21.443	24.878	33.112	45.294	86.218	1.522	170
180	21.443	34.185	21.443	24.852	33.112	45.598	79.783	1.605	180
190	21.443	34.185	21.443	24.826	33.112	45.877	71.877	1.682	190
200	21.443	34.185	21.443	24.800	33.112	46.139	60.087	1.754	200
210	21.443	34.185	21.443	24.774	33.112	46.402	55.217	1.822	210
220	21.443	34.185	21.443	24.748	33.112	46.648	63.734	1.887	220
230	21.443	34.185	21.443	24.722	33.112	46.875	61.103	1.949	230
240	21.443	34.185	21.443	24.696	33.112	47.101	60.718	1.955	240

## WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	SIG 02	02 SAT	SIG 03	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TDSIN	DEG C				DB
2	21.193	34.291	5.06	103.8	0.7	0.07	0.0	0.00	21.193	24.129	32.486	40.485		2
10	21.192	34.285	5.26	104.5	0.7	0.08	0.0	0.00	21.108	24.605	33.113	41.060		23
20	21.194	34.110	5.17	104.1	1.3	0.11	0.0	0.00	20.104	24.846	33.294	41.379		53
30	21.193	34.115	5.36	101.0	2.9	0.0	0.0	0.01	16.703	25.182	33.941	42.110		103
40	21.193	34.199	5.16	91.1	3.9	0.37	1.5	0.09	10.314	25.595	34.204	42.440		136
50	21.193	34.187	5.21	89.2	5.1	0.54	5.1	0.12	13.951	25.736	34.460	42.748		169
60	21.193	34.187	5.15	85.9	7.9	0.69	8.4	0.01	12.517	25.932	34.645	42.990		203
70	21.193	34.187	5.12	92.9	11.8	0.86	11.7	0.00	11.279	26.118	34.886	43.271		253
80	21.193	34.187	5.12	73.6	15.3	1.05	14.6	0.00	10.104	26.265	35.074	43.497		306
90	21.193	34.187	5.12	48.9	27.5		20.2	0.00	8.787	26.453	35.348	43.942		407
100	21.193	34.187	5.12	46.9	49.9		29.1	0.00	6.609	26.588	35.665	44.245		507
110	21.193	34.187	5.12	25.9	72.7		17.2	0.01	5.192	26.878	35.923	44.558		607
120	21.193	34.187	5.12	11.4	91.5		41.9	0.00	4.568	27.045	36.120	44.792		708
130	21.193	34.187	5.12	5.1	109.1		43.7	0.00	4.149	27.182	36.277	44.957		810
140	21.193	34.187	5.12	5.1	119.1	3.19	44.1	0.00	3.948	27.289	36.397	45.101		910
150	21.193	34.187	5.12	9.3	123.4	3.14	44.0	0.00	3.513	27.365	36.484	45.148		1010
160	21.193	34.187	5.12	14.8	132.8		42.9	0.01	3.071	27.435	36.642	45.281		1262
170	21.193	34.187	5.12	19.2	142.9	2.95	42.2	0.00	2.623	27.570	36.740	45.501		1508

# MARATHON 2 STA. 18



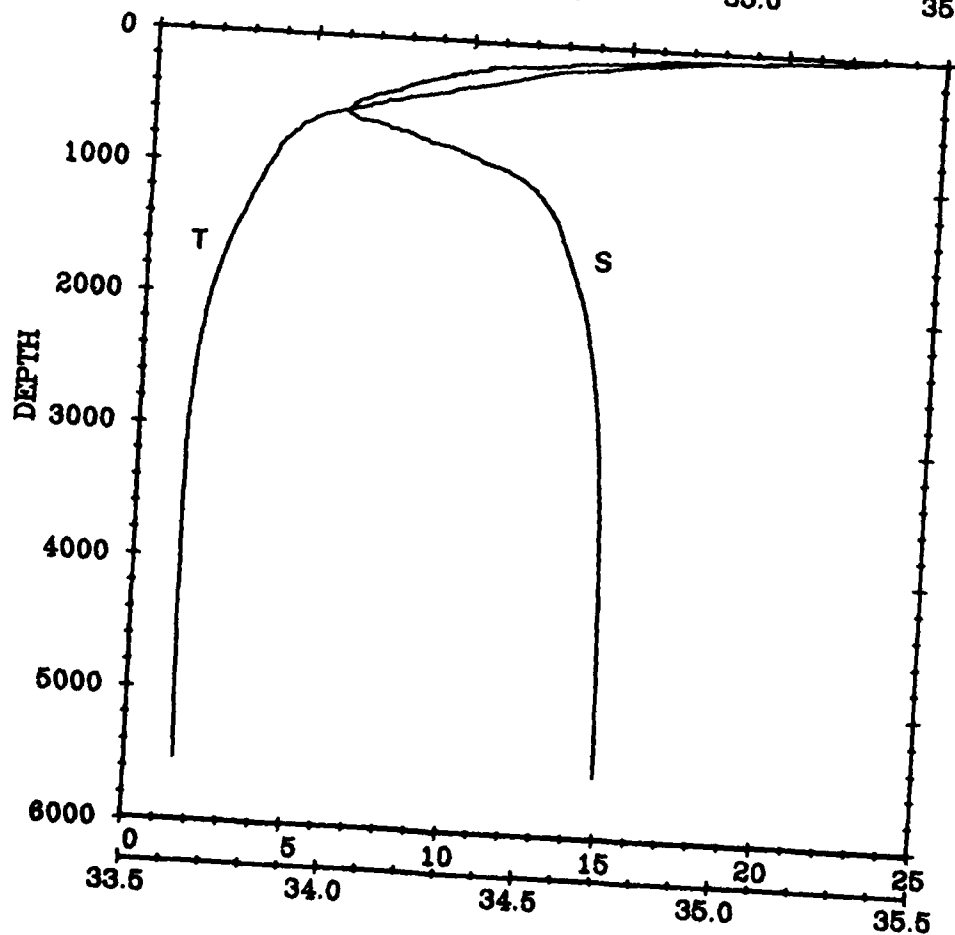
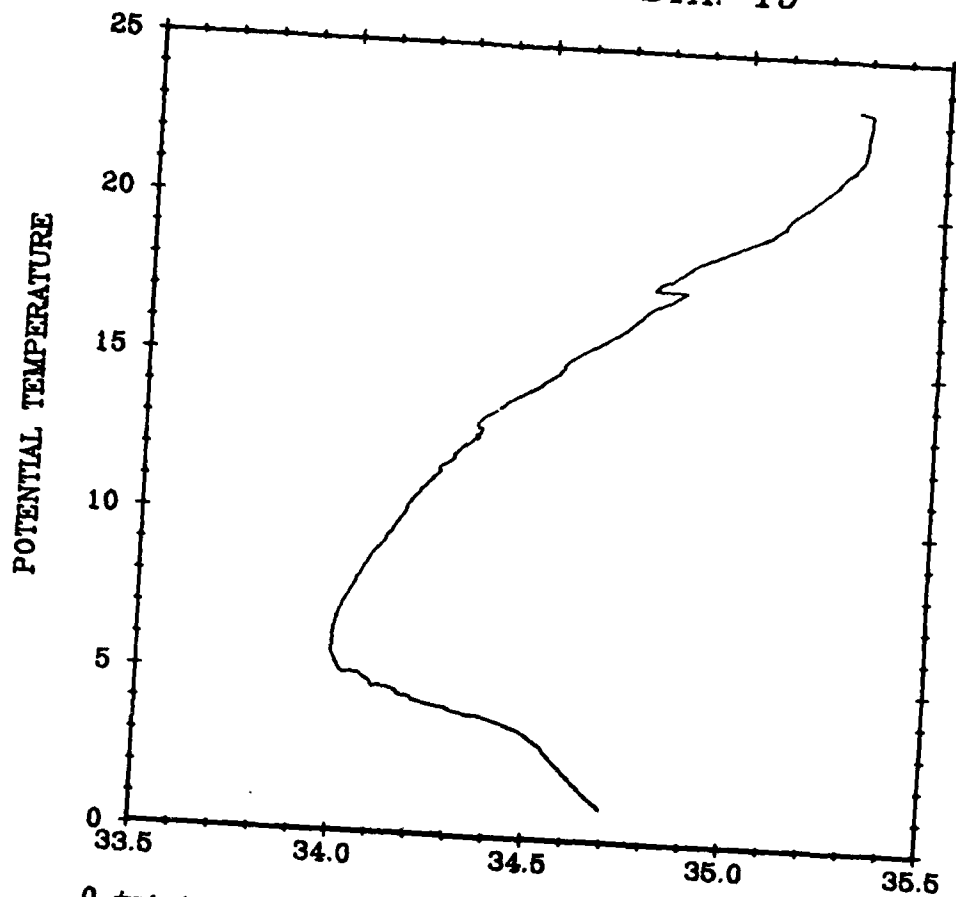
R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 11

LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
21 41.5N	152 23.5W	5 10 94	242	5113	110	KT	27.5	22.2	1021.0

STD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C	PSU	DEG C	KG/CM3	KG/CM3	KG/CM3	KG/CM3	KG/CM3	CM	M
1	23.247	35.235	23.247	24.399	32.441	40.436	391.497	1.000	0	0
20	22.507	35.239	22.513	24.275	32.545	40.538	384.555	1.000	19	19
40	21.347	35.231	21.359	24.593	33.110	41.146	375.129	1.000	39	39
60	19.347	35.248	19.356	24.713	33.443	41.548	269.596	1.000	59	59
80	17.347	34.913	17.353	23.210	35.734	41.839	277.612	1.000	79	79
100	15.347	34.765	15.752	23.191	31.948	42.135	260.924	1.000	99	99
120	13.347	34.542	14.164	23.573	34.111	42.539	235.359	1.000	119	119
140	11.347	34.347	12.993	23.919	34.512	42.935	211.911	1.000	139	139
160	9.347	34.231	11.972	24.250	34.792	43.153	201.603	1.000	159	159
180	7.347	34.218	11.042	24.269	34.908	43.191	191.752	1.000	179	179
200	5.347	34.157	9.995	24.296	35.110	43.556	179.247	1.000	199	199
220	3.347	34.119	9.274	24.385	35.239	43.774	171.199	1.000	219	219
240	1.347	34.055	8.101	24.507	35.424	43.949	159.794	1.000	239	239
260	0.229	34.015	7.191	24.618	35.548	44.123	149.129	1.000	259	259
280	0.573	33.995	5.523	24.817	35.847	44.477	129.461	1.000	279	279
300	4.659	34.112	4.653	27.116	36.090	44.751	111.710	1.000	299	299
320	4.222	34.218	4.162	27.147	36.242	44.932	98.434	1.000	319	319
340	3.921	34.330	3.854	27.268	36.377	45.081	87.655	1.000	339	339
360	3.704	34.418	3.611	27.251	36.480	45.193	79.409	1.000	359	359
380	3.489	34.472	3.439	27.425	36.555	45.278	73.667	1.000	379	379
400	3.276	34.502	3.170	27.470	36.611	45.344	69.682	1.000	399	399
420	3.196	34.525	3.034	27.505	36.656	45.399	66.555	1.000	419	419
440	2.909	34.543	2.839	27.538	36.698	45.450	63.659	1.000	439	439
460	2.731	34.556	2.626	27.564	36.734	45.495	61.212	1.000	459	459
480	2.364	34.569	2.453	27.589	36.769	45.538	58.817	1.000	479	479
500	2.437	34.580	2.313	27.610	36.797	45.573	56.957	1.000	499	499
520	2.292	34.593	2.158	27.632	36.827	45.610	54.840	1.000	519	519
540	2.167	34.604	2.037	27.651	36.853	45.644	52.986	1.000	539	539
560	2.048	34.614	1.911	27.669	36.878	45.675	51.238	1.000	559	559
580	1.957	34.622	1.813	27.683	36.897	45.699	49.942	1.000	579	579
600	1.893	34.628	1.731	27.694	36.912	45.718	48.971	1.000	599	599
620	1.827	34.634	1.661	27.705	36.927	45.736	48.112	1.000	619	619
640	1.779	34.640	1.591	27.715	36.940	45.753	47.240	1.000	639	639
660	1.700	34.646	1.525	27.724	36.953	45.771	46.397	1.000	659	659
680	1.659	34.650	1.475	27.731	36.963	45.782	45.885	1.000	679	679
700	1.615	34.655	1.424	27.739	36.974	45.795	45.270	1.000	699	699
720	1.585	34.659	1.385	27.745	36.982	45.805	44.895	1.000	719	719
740	1.559	34.663	1.350	27.750	36.989	45.814	44.541	1.000	739	739
760	1.539	34.666	1.321	27.755	36.995	45.822	44.343	1.000	759	759
780	1.522	34.669	1.295	27.759	37.001	45.829	44.175	1.000	779	779
800	1.510	34.671	1.274	27.762	37.005	45.835	44.144	1.000	799	799
820	1.501	34.673	1.255	27.765	37.009	45.839	44.149	1.000	819	819
840	1.491	34.675	1.237	27.768	37.013	45.844	44.164	1.000	839	839
860	1.489	34.677	1.222	27.771	37.016	45.848	44.219	1.000	859	859
880	1.484	34.678	1.208	27.773	37.019	45.852	44.155	1.000	879	879
900	1.479	34.680	1.192	27.775	37.023	45.856	44.197	1.000	899	899
920	1.475	34.681	1.178	27.777	37.025	45.859	44.533	1.000	919	919
940	1.474	34.682	1.167	27.779	37.027	45.862	44.707	1.000	939	939
960	1.473	34.683	1.155	27.780	37.030	45.865	44.879	1.000	959	959
980	1.475	34.684	1.146	27.781	37.031	45.867	45.097	1.000	979	979
1000	1.476	34.685	1.136	27.783	37.034	45.870	45.297	1.000	999	999
1020	1.480	34.686	1.128	27.784	37.035	45.872	45.545	1.000	1019	1019
1040	1.484	34.687	1.121	27.786	37.037	45.874	45.794	1.000	1039	1039
1060	1.481	34.687	1.107	27.787	37.039	45.877	45.995	1.000	1059	1059
1080	1.484	34.688	1.098	27.788	37.041	45.879	46.225	1.000	1079	1079
1100	1.490	34.689	1.092	27.789	37.042	45.881	46.506	1.000	1099	1099
1120	1.492	34.689	1.082	27.790	37.043	45.883	46.787	1.000	1119	1119
1140	1.494	34.691	1.072	27.792	37.046	45.886	46.928	1.000	1139	1139
1160	1.497	34.691	1.063	27.793	37.047	45.887	47.225	1.000	1159	1159
1180	1.502	34.692	1.055	27.794	37.049	45.890	47.489	1.000	1179	1179
1200	1.509	34.692	1.050	27.794	37.050	45.891	47.855	1.000	1199	1199
1220	1.519	34.692	1.047	27.795	37.050	45.891	48.280	1.000	1219	1219
1240	1.530	34.693	1.045	27.796	37.051	45.892	48.655	1.000	1239	1239
1260	1.542	34.693	1.044	27.796	37.051	45.892	49.120	1.000	1259	1259
1280	1.554	34.693	1.042	27.796	37.052	45.893	49.587	1.000	1279	1279
1300	1.559	34.693	1.042	27.796	37.052	45.893	49.773	1.000	1299	1299

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIOL	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PSU	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C	KG/CM3	KG/CM3	KG/CM3	DB
1	23.739	35.116	5.10	103.7	1.1	0.07	0.0	0.00	23.739	23.739	32.959	32.298	40.280	1
5	19.135	35.124	5.42	103.3	1.9	0.10	0.0	0.00	19.125	25.009	33.485	41.597	41.597	57
10	16.201	34.704	5.37	96.5	2.7	0.24	1.1	0.24	16.194	25.476	34.053	42.259	42.259	107
15	14.471	34.514	5.28	98.1	4.8	0.47	5.1	0.02	14.448	25.717	34.359	42.626	42.626	158
20	12.473	34.379	5.24	97.9	7.7	0.54	7.9	0.01	12.842	25.928	34.633	42.958	42.958	207
25	10.491	34.193	4.95	99.2	15.2	1.00	13.9	0.00	10.554	26.209	35.004	43.413	43.413	258
30	9.561	34.291	4.48	98.2	24.3	1.45	22.5	0.00	9.519	26.473	35.362	43.958	43.958	307
35	8.716	34.207	3.34	48.8	48.4	2.70	23.8	0.00	8.729	26.673	35.645	44.219	44.219	358
40	8.115	34.242	1.59	22.3	78.5	3.9	39.4	0.00	8.066	26.908	35.960	44.610	44.610	408
45	4.483	34.149	0.94	11.6	98.1	3.20	42.2	0.00	4.434	27.064	36.145	44.824	44.824	458
50	4.194	34.261	0.45	6.2	113.8	3.13	44.0	0.00	4.033	27.195	36.295	44.991	44.991	509
55	3.556	34.371	0.45	6.1	122.2	3.17	44.3	0.00	3.739	27.291	36.403	45.139	45.139	559
60	3.547	34.431	0.56	9.0	124.8	3.14	43.9	0.00	3.573	27.376	36.498	45.214	45.214	609
65	3.29	34.521	1.15	15.4	114.8	3.05	42.9	0.00	3.318	27.499	36.548	45.388	45.388	659
70	2.20	34.561	1.43	19.0	146.2		42.4	0.00	2.614	27.569	36.740	45.501	45.501	709
75	2.161	34.590	1.61	21.2	155.4		41.9	0.00	2.239	27.624	36.814	45.595	45.595	759
80	2.148	34.617	1.91	23.5	165.2		41.3	0.01	1.909	27.672	36.880	45.677	45.677	809
85	1.538	34.649	2.15	10.3	172.7		39.9	0.01	1.521	27.727	36.956	45.771	45.771	859
90	1.545	34.658	2.19	35.9	169.7		38.6	0.01	1.324	27.756	36.996	45.823	45.823	909
95	1.495	34.679	3.18	40.7	166.6	2.57	37.7	0.00	1.216	27.773	37.019	45.851	45.851	959
100	1.475	34.686	3.19	43.4	160.8	2.52	37.1	0.00	1.152	27.783	37.032	45.867	45.867	1009
105	1.499	34.691	3.15	47.8	148.2	2.40	35.9	0.00	1.057	27.793	37.048	45.888	45.888	1059
110	1.559	34.693	3.70	47.2	144.9		35.7	0.02	1.041	27.796	37.051	45.892	45.892	1109

# MARATHON 2 STA. 19



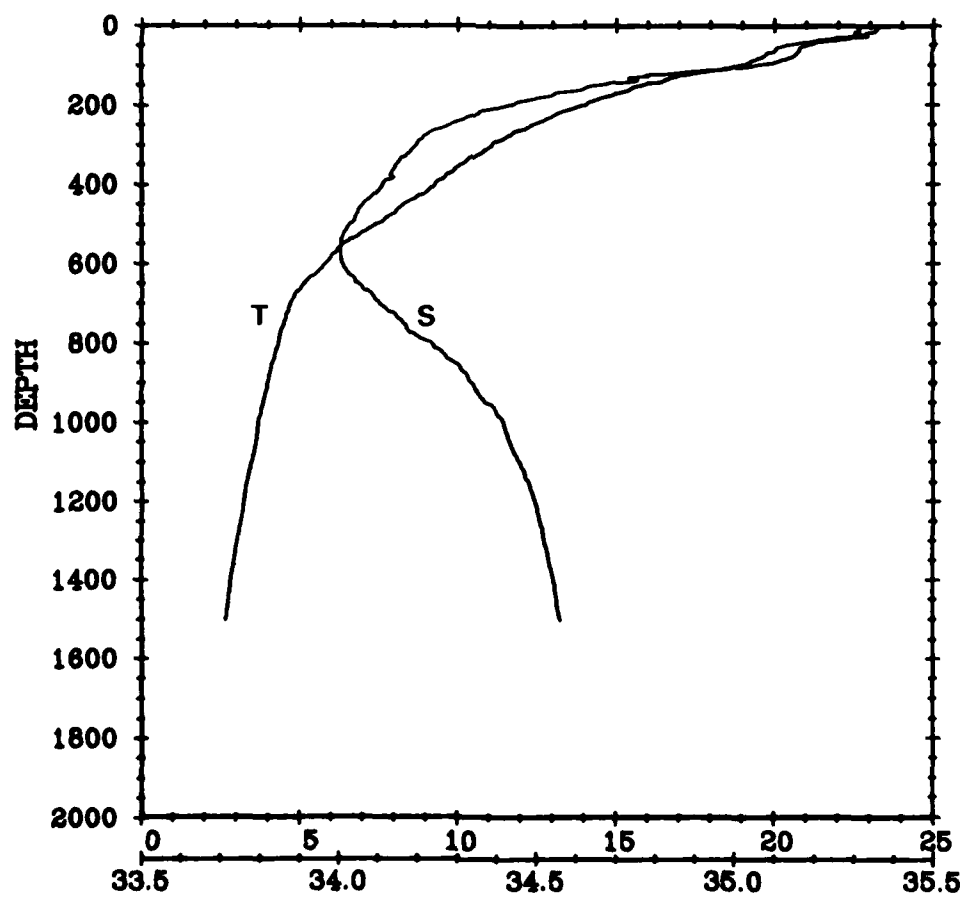
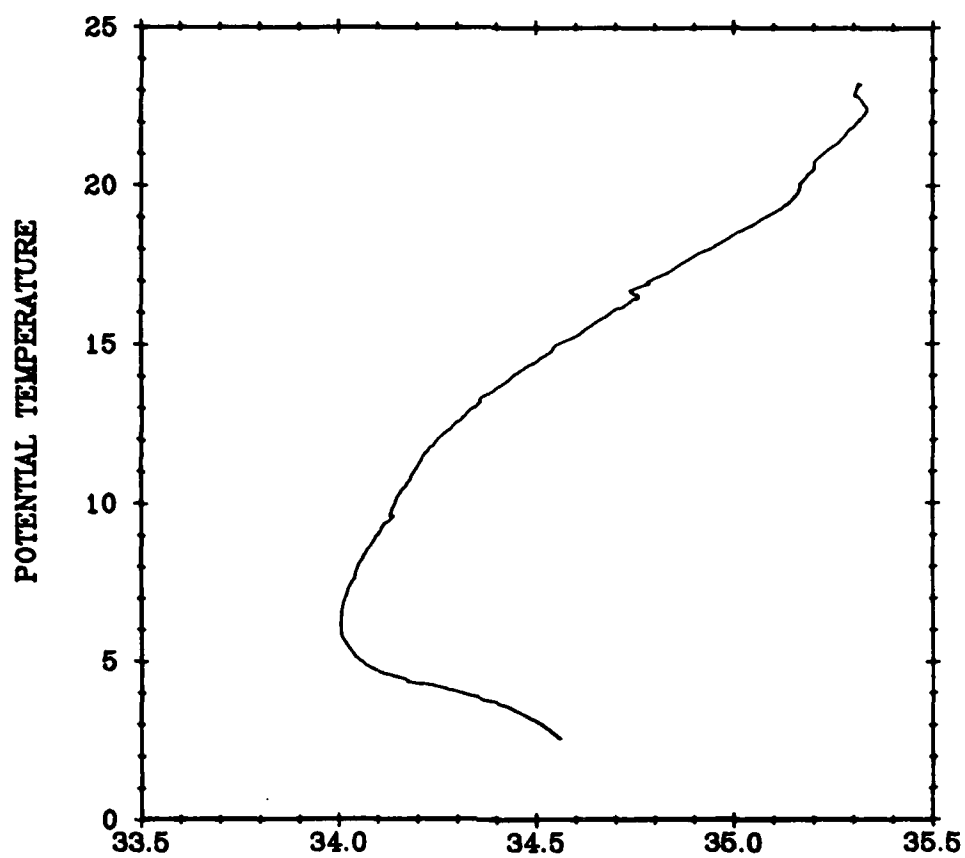
LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	SOFT M	WIND	SPEED	AIR TEMP	WET BULB	BAR M
					GMT	M	DIR	KT	DEG C	DEG C	MM
28 22 N	152 04 W	11	11	94	1004	1432	210	4	22.2	20.0	1012.4

JTD DATA		SALINITY	POT TEMP DEG C	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	SIGMA 8	SIGMA 10	SIGMA 12	SIGMA 14	SIGMA 16	SIGMA 18	SIGMA 20	SIGMA 22	SIGMA 24	SIGMA 26	SIGMA 28	SIGMA 30	SIGMA 32	SIGMA 34	SIGMA 36	SIGMA 38	SIGMA 40	SIGMA 42	SIGMA 44	SIGMA 46	SIGMA 48	SIGMA 50	SIGMA 52	SIGMA 54	SIGMA 56	SIGMA 58	SIGMA 60	SIGMA 62	SIGMA 64	SIGMA 66	SIGMA 68	SIGMA 70	SIGMA 72	SIGMA 74	SIGMA 76	SIGMA 78	SIGMA 80	SIGMA 82	SIGMA 84	SIGMA 86	SIGMA 88	SIGMA 90	SIGMA 92	SIGMA 94	SIGMA 96	SIGMA 98	SIGMA 100	SIGMA 102	SIGMA 104	SIGMA 106	SIGMA 108	SIGMA 110	SIGMA 112	SIGMA 114	SIGMA 116	SIGMA 118	SIGMA 120	SIGMA 122	SIGMA 124	SIGMA 126	SIGMA 128	SIGMA 130	SIGMA 132	SIGMA 134	SIGMA 136	SIGMA 138	SIGMA 140	SIGMA 142	SIGMA 144	SIGMA 146	SIGMA 148	SIGMA 150	SIGMA 152	SIGMA 154	SIGMA 156	SIGMA 158	SIGMA 160	SIGMA 162	SIGMA 164	SIGMA 166	SIGMA 168	SIGMA 170	SIGMA 172	SIGMA 174	SIGMA 176	SIGMA 178	SIGMA 180	SIGMA 182	SIGMA 184	SIGMA 186	SIGMA 188	SIGMA 190	SIGMA 192	SIGMA 194	SIGMA 196	SIGMA 198	SIGMA 200	SIGMA 202	SIGMA 204	SIGMA 206	SIGMA 208	SIGMA 210	SIGMA 212	SIGMA 214	SIGMA 216	SIGMA 218	SIGMA 220	SIGMA 222	SIGMA 224	SIGMA 226	SIGMA 228	SIGMA 230	SIGMA 232	SIGMA 234	SIGMA 236	SIGMA 238	SIGMA 240	SIGMA 242	SIGMA 244	SIGMA 246	SIGMA 248	SIGMA 250	SIGMA 252	SIGMA 254	SIGMA 256	SIGMA 258	SIGMA 260	SIGMA 262	SIGMA 264	SIGMA 266	SIGMA 268	SIGMA 270	SIGMA 272	SIGMA 274	SIGMA 276	SIGMA 278	SIGMA 280	SIGMA 282	SIGMA 284	SIGMA 286	SIGMA 288	SIGMA 290	SIGMA 292	SIGMA 294	SIGMA 296	SIGMA 298	SIGMA 300	SIGMA 302	SIGMA 304	SIGMA 306	SIGMA 308	SIGMA 310	SIGMA 312	SIGMA 314	SIGMA 316	SIGMA 318	SIGMA 320	SIGMA 322	SIGMA 324	SIGMA 326	SIGMA 328	SIGMA 330	SIGMA 332	SIGMA 334	SIGMA 336	SIGMA 338	SIGMA 340	SIGMA 342	SIGMA 344	SIGMA 346	SIGMA 348	SIGMA 350	SIGMA 352	SIGMA 354	SIGMA 356	SIGMA 358	SIGMA 360	SIGMA 362	SIGMA 364	SIGMA 366	SIGMA 368	SIGMA 370	SIGMA 372	SIGMA 374	SIGMA 376	SIGMA 378	SIGMA 380	SIGMA 382	SIGMA 384	SIGMA 386	SIGMA 388	SIGMA 390	SIGMA 392	SIGMA 394	SIGMA 396	SIGMA 398	SIGMA 400	SIGMA 402	SIGMA 404	SIGMA 406	SIGMA 408	SIGMA 410	SIGMA 412	SIGMA 414	SIGMA 416	SIGMA 418	SIGMA 420	SIGMA 422	SIGMA 424	SIGMA 426	SIGMA 428	SIGMA 430	SIGMA 432	SIGMA 434	SIGMA 436	SIGMA 438	SIGMA 440	SIGMA 442	SIGMA 444	SIGMA 446	SIGMA 448	SIGMA 450	SIGMA 452	SIGMA 454	SIGMA 456	SIGMA 458	SIGMA 460	SIGMA 462	SIGMA 464	SIGMA 466	SIGMA 468	SIGMA 470	SIGMA 472	SIGMA 474	SIGMA 476	SIGMA 478	SIGMA 480	SIGMA 482	SIGMA 484	SIGMA 486	SIGMA 488	SIGMA 490	SIGMA 492	SIGMA 494	SIGMA 496	SIGMA 498	SIGMA 500	SIGMA 502	SIGMA 504	SIGMA 506	SIGMA 508	SIGMA 510	SIGMA 512	SIGMA 514	SIGMA 516	SIGMA 518	SIGMA 520	SIGMA 522	SIGMA 524	SIGMA 526	SIGMA 528	SIGMA 530	SIGMA 532	SIGMA 534	SIGMA 536	SIGMA 538	SIGMA 540	SIGMA 542	SIGMA 544
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WISKIN BOTTLE DATA															
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIG1	PC4	NO3	NO2	TRIT	POT	TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	°C	PSU	ML/L	%	UMOL	UMOL	UMOL	UMOL	PUBIN	°C	°C	KG/M3	KG/M3	KG/M3	DB
1	20.198	35.359	5.12	103.1	2.5	2.32	3.0	0.10		23.198	24.112	32.466	40.462	1	
33	20.204	35.349	5.13	101.7	2.2	2.24	3.0	0.10		20.194	24.942	33.232	41.161	53	
103	19.691	35.104	5.11	97.5	2.7		2.1	0.6		19.573	25.195	33.629	41.761	103	
105	16.299	34.710	4.91	88.4	4.1	3.35	3.5	0.12		15.277	25.466	34.036	42.239	136	
149	14.304	34.342	4.93	86.2	5.5	4.46	5.1	0.11		14.878	25.546	34.272	42.263	169	
203	13.692	34.412	5.17	96.4	5.7	3.85	6.5	0.11		13.457	25.857	34.479	42.313	203	
273	12.147	34.257	5.10	92.3	7.9	3.74	9.8	0.10		12.114	26.074	34.726	43.079	254	
314	11.493	34.197	5.03	90.9	14.5	3.94	13.0	0.10		10.956	26.171	34.933	43.311	305	
414	9.998	34.100	4.64	71.4	25.4		19.1	0.10		8.954	26.421	35.291	43.911	356	
514	7.444	34.117	3.19	43.9	46.1		29.1	0.10		4.996	26.640	35.604	44.767	406	
614	5.666	34.121	2.00	28.4	69.9		36.3	0.11		5.517	26.839	35.863	44.993	457	
704	4.642	34.119	1.97	13.5	92.3		41.7	0.10		4.597	27.023	36.098	44.769	499	
804	4.285	34.239	0.47	6.5	107.4		43.8	0.10		4.223	27.157	36.249	44.936	809	
904	3.953	34.340	0.43	1.9	117.3	3.17	44.6	0.10		3.885	27.273	36.330	45.082	910	
1004	3.685	34.420	0.66	9.7	124.9	3.11	44.2	0.10		3.612	27.364	36.494	45.159	1001	
1104	3.132	34.511	1.00	13.4	137.5		43.5	0.11		3.042	27.491	36.619	45.081	1264	
1501	2.659	34.559	1.37	19.1	147.6	2.36	43.0	0.10		2.534	27.573	36.747	45.311	1504	



# MARATHON 2 STA. 20

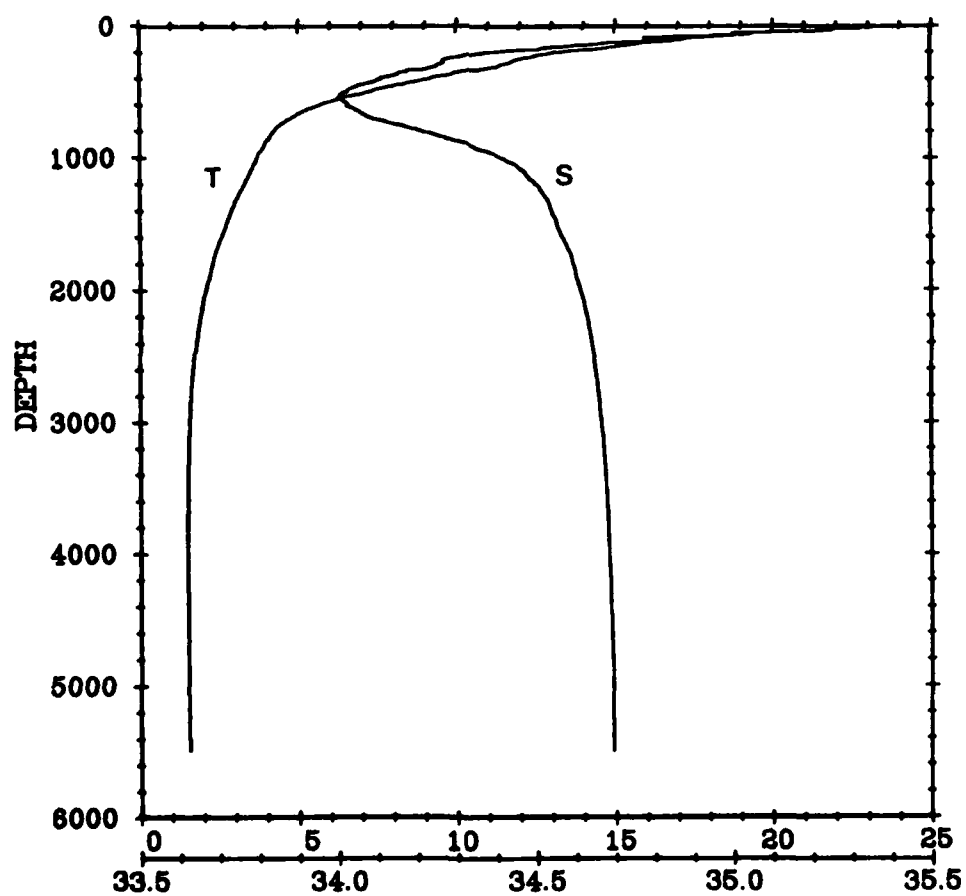
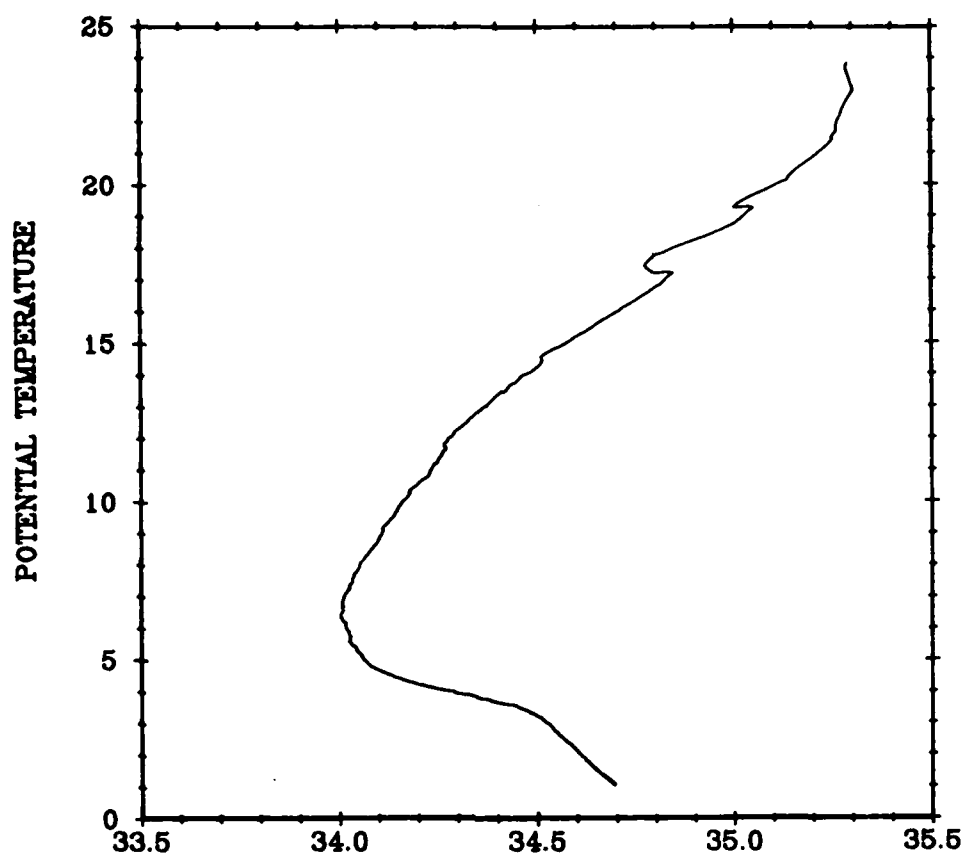


LATITUDE	LONGITUDE	MO/DY/YR	START TIME	S TO N	WIND	SPEED	AIR TEMP	WET BULB	WAVE H
24 14 N	132 40 W	11 10 84	014	1044	210	10	10.0	10.0	10.0

CTD DATA									
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				10 TO N		M
1	21.517	34.942	21.517	24.004	42.312	48.140	184.400	1.000	
2	22.412	34.939	22.412	24.004	42.312	48.140	184.400	1.000	
3	23.276	34.935	23.276	24.004	42.312	48.140	184.400	1.000	
4	24.121	34.931	24.121	24.004	42.312	48.140	184.400	1.000	
5	24.947	34.927	24.947	24.004	42.312	48.140	184.400	1.000	
6	25.754	34.923	25.754	24.004	42.312	48.140	184.400	1.000	
7	26.542	34.919	26.542	24.004	42.312	48.140	184.400	1.000	
8	27.311	34.915	27.311	24.004	42.312	48.140	184.400	1.000	
9	28.061	34.911	28.061	24.004	42.312	48.140	184.400	1.000	
10	28.792	34.907	28.792	24.004	42.312	48.140	184.400	1.000	
11	29.504	34.903	29.504	24.004	42.312	48.140	184.400	1.000	
12	30.197	34.899	30.197	24.004	42.312	48.140	184.400	1.000	
13	30.871	34.895	30.871	24.004	42.312	48.140	184.400	1.000	
14	31.526	34.891	31.526	24.004	42.312	48.140	184.400	1.000	
15	32.162	34.887	32.162	24.004	42.312	48.140	184.400	1.000	
16	32.779	34.883	32.779	24.004	42.312	48.140	184.400	1.000	
17	33.377	34.879	33.377	24.004	42.312	48.140	184.400	1.000	
18	33.956	34.875	33.956	24.004	42.312	48.140	184.400	1.000	
19	34.516	34.871	34.516	24.004	42.312	48.140	184.400	1.000	
20	35.057	34.867	35.057	24.004	42.312	48.140	184.400	1.000	
21	35.579	34.863	35.579	24.004	42.312	48.140	184.400	1.000	
22	36.082	34.859	36.082	24.004	42.312	48.140	184.400	1.000	
23	36.566	34.855	36.566	24.004	42.312	48.140	184.400	1.000	
24	37.031	34.851	37.031	24.004	42.312	48.140	184.400	1.000	
25	37.477	34.847	37.477	24.004	42.312	48.140	184.400	1.000	
26	37.904	34.843	37.904	24.004	42.312	48.140	184.400	1.000	
27	38.312	34.839	38.312	24.004	42.312	48.140	184.400	1.000	
28	38.701	34.835	38.701	24.004	42.312	48.140	184.400	1.000	
29	39.071	34.831	39.071	24.004	42.312	48.140	184.400	1.000	
30	39.422	34.827	39.422	24.004	42.312	48.140	184.400	1.000	
31	39.754	34.823	39.754	24.004	42.312	48.140	184.400	1.000	
32	40.067	34.819	40.067	24.004	42.312	48.140	184.400	1.000	
33	40.361	34.815	40.361	24.004	42.312	48.140	184.400	1.000	
34	40.636	34.811	40.636	24.004	42.312	48.140	184.400	1.000	
35	40.892	34.807	40.892	24.004	42.312	48.140	184.400	1.000	
36	41.129	34.803	41.129	24.004	42.312	48.140	184.400	1.000	
37	41.347	34.799	41.347	24.004	42.312	48.140	184.400	1.000	
38	41.546	34.795	41.546	24.004	42.312	48.140	184.400	1.000	
39	41.726	34.791	41.726	24.004	42.312	48.140	184.400	1.000	
40	41.887	34.787	41.887	24.004	42.312	48.140	184.400	1.000	
41	42.029	34.783	42.029	24.004	42.312	48.140	184.400	1.000	
42	42.152	34.779	42.152	24.004	42.312	48.140	184.400	1.000	
43	42.256	34.775	42.256	24.004	42.312	48.140	184.400	1.000	
44	42.341	34.771	42.341	24.004	42.312	48.140	184.400	1.000	
45	42.407	34.767	42.407	24.004	42.312	48.140	184.400	1.000	
46	42.454	34.763	42.454	24.004	42.312	48.140	184.400	1.000	
47	42.482	34.759	42.482	24.004	42.312	48.140	184.400	1.000	
48	42.491	34.755	42.491	24.004	42.312	48.140	184.400	1.000	
49	42.481	34.751	42.481	24.004	42.312	48.140	184.400	1.000	
50	42.452	34.747	42.452	24.004	42.312	48.140	184.400	1.000	
51	42.404	34.743	42.404	24.004	42.312	48.140	184.400	1.000	
52	42.337	34.739	42.337	24.004	42.312	48.140	184.400	1.000	
53	42.252	34.735	42.252	24.004	42.312	48.140	184.400	1.000	
54	42.148	34.731	42.148	24.004	42.312	48.140	184.400	1.000	
55	42.025	34.727	42.025	24.004	42.312	48.140	184.400	1.000	
56	41.883	34.723	41.883	24.004	42.312	48.140	184.400	1.000	
57	41.722	34.719	41.722	24.004	42.312	48.140	184.400	1.000	
58	41.542	34.715	41.542	24.004	42.312	48.140	184.400	1.000	
59	41.343	34.711	41.343	24.004	42.312	48.140	184.400	1.000	
60	41.125	34.707	41.125	24.004	42.312	48.140	184.400	1.000	
61	40.888	34.703	40.888	24.004	42.312	48.140	184.400	1.000	
62	40.632	34.699	40.632	24.004	42.312	48.140	184.400	1.000	
63	40.357	34.695	40.357	24.004	42.312	48.140	184.400	1.000	
64	40.062	34.691	40.062	24.004	42.312	48.140	184.400	1.000	
65	39.747	34.687	39.747	24.004	42.312	48.140	184.400	1.000	
66	39.412	34.683	39.412	24.004	42.312	48.140	184.400	1.000	
67	39.057	34.679	39.057	24.004	42.312	48.140	184.400	1.000	
68	38.682	34.675	38.682	24.004	42.312	48.140	184.400	1.000	
69	38.287	34.671	38.287	24.004	42.312	48.140	184.400	1.000	
70	37.872	34.667	37.872	24.004	42.312	48.140	184.400	1.000	
71	37.437	34.663	37.437	24.004	42.312	48.140	184.400	1.000	
72	36.982	34.659	36.982	24.004	42.312	48.140	184.400	1.000	
73	36.507	34.655	36.507	24.004	42.312	48.140	184.400	1.000	
74	36.012	34.651	36.012	24.004	42.312	48.140	184.400	1.000	
75	35.497	34.647	35.497	24.004	42.312	48.140	184.400	1.000	
76	34.962	34.643	34.962	24.004	42.312	48.140	184.400	1.000	
77	34.407	34.639	34.407	24.004	42.312	48.140	184.400	1.000	
78	33.832	34.635	33.832	24.004	42.312	48.140	184.400	1.000	
79	33.237	34.631	33.237	24.004	42.312	48.140	184.400	1.000	
80	32.622	34.627	32.622	24.004	42.312	48.140	184.400	1.000	
81	31.987	34.623	31.987	24.004	42.312	48.140	184.400	1.000	
82	31.332	34.619	31.332	24.004	42.312	48.140	184.400	1.000	
83	30.657	34.615	30.657	24.004	42.312	48.140	184.400	1.000	
84	29.962	34.611	29.962	24.004	42.312	48.140	184.400	1.000	
85	29.247	34.607	29.247	24.004	42.312	48.140	184.400	1.000	
86	28.512	34.603	28.512	24.004	42.312	48.140	184.400	1.000	
87	27.757	34.599	27.757	24.004	42.312	48.140	184.400	1.000	
88	26.982	34.595	26.982	24.004	42.312	48.140	184.400	1.000	
89	26.187	34.591	26.187	24.004	42.312	48.140	184.400	1.000	
90	25.372	34.587	25.372	24.004	42.312	48.140	184.400	1.000	
91	24.537	34.583	24.537	24.004	42.312	48.140	184.400	1.000	
92	23.682	34.579	23.682	24.004	42.312	48.140	184.400	1.000	
93	22.807	34.575	22.807	24.004	42.312	48.140	184.400	1.000	
94	21.912	34.571	21.912	24.004	42.312	48.140	184.400	1.000	
95	21.007	34.567	21.007	24.004	42.312	48.140	184.400	1.000	
96	20.092	34.563	20.092	24.004	42.312	48.140	184.400	1.000	
97	19.167	34.559	19.167	24.004	42.312	48.140	184.400	1.000	
98	18.232	34.555	18.232	24.004	42.312	48.140	184.400	1.000	
99	17.287	34.551	17.287	24.004	42.312	48.140	184.400	1.000	
100	16.332	34.547	16.332	24.004	42.312	48.140	184.400	1.000	

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
4	21.545	35.153	5.56	104.6	0.6	0.04	0.0	0.00		21.544	24.044	32.388	40.375	4
57	18.797	34.926	5.54	104.8	1.5	0.09	0.0	0.00		18.787	25.004	33.493	41.516	57
107	17.149	34.838	4.92	90.0	2.8	0.30	0.0	0.01		17.031	25.383	33.930	42.107	107
157	15.102	34.838	5.03	88.4	3.7	0.40	4.4	0.02		15.078	25.638	34.256	42.590	157
327	11.204	34.844	5.29	95.5	11.8	0.85	11.5	0.01		11.166	26.157	34.930	43.199	327
497	9.581	34.813	4.98	75.2	23.9	1.31	18.7	0.01		9.036	26.418	35.293	43.758	497
507	9.542	34.816	3.49	51.3	44.3	1.92	2.9	0.01		6.997	26.544	35.601	44.166	507
625	8.591	34.840	1.88	26.7	70.5		36.1	0.01		5.541	26.851	35.874	44.577	625
707	8.491	34.840	1.10	15.3	109.3	2.92	44.4	0.01		4.635	27.110	36.182	44.971	707
809	8.137	34.832	0.51	0	109.3	3.09	44.7	0.01		4.126	27.162	36.259	45.070	809
909	8.939	34.845	0.48	6.6	119.7	3.13	44.5	0.01		3.811	27.292	36.392	45.366	909
1009	8.672	34.839	0.65	8.8	124.7	3.13	44.2	0.01		3.598	27.165	36.485	45.220	1009
1259	3.217	34.513	1.15	15.4	134.1	3.05	41.2	0.00		3.126	27.485	36.629	45.355	1259
1507	2.728	34.555	1.14	17.9	145.8		42.2	0.01		2.621	27.563	36.714	45.495	1507
1757	2.379	34.594	1.67	21.9	156.6		42.2	0.01		2.287	27.611	36.824	45.607	1757
2007	2.065	34.613	1.90	23.5	164.1		41.7	0.02		1.925	27.567	36.875	45.611	2007
2507	1.700	34.553	2.37	10.6	159.1		42.1	0.01		1.722	27.710	36.954	45.716	2507
3004	1.553	34.665	2.79	15.8	172.4		39.0	0.01		1.510	27.753	36.991	45.819	3004
3504	1.497	34.670	3.17	40.6	167.1	2.53	39.1	0.01		1.223	27.771	37.016	45.848	3504
4001	1.479	34.687	3.39	43.4	160.3	2.53	37.4	0.01		1.152	27.793	37.038	45.868	4001
4499	1.499	34.691			154.5		36.9	0.00		1.104	27.790	37.042	45.890	4499
4993	1.508	34.690	3.72	47.5	148.4	2.42	36.4	0.00		1.162	27.792	37.046	45.896	4993
5521	1.559	34.694	3.70	47.2	145.9		36.1	0.01		1.042	27.797	37.052	45.891	5521

# MARATHON 2 STA. 21



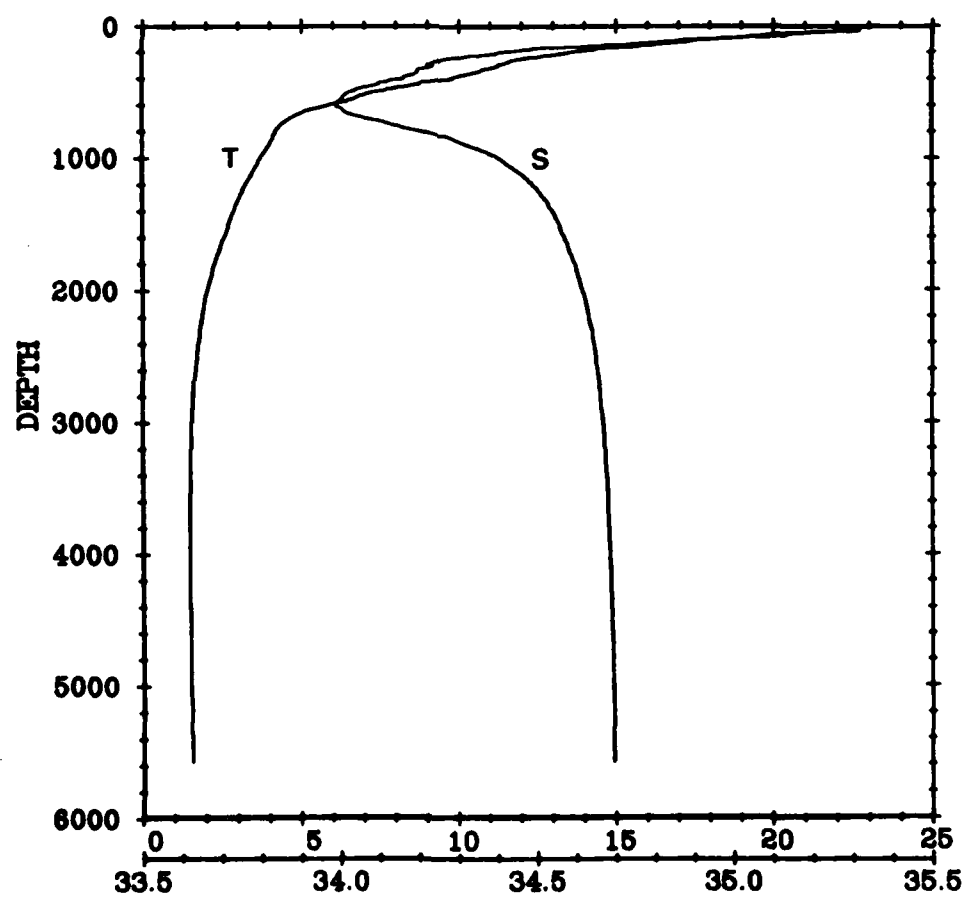
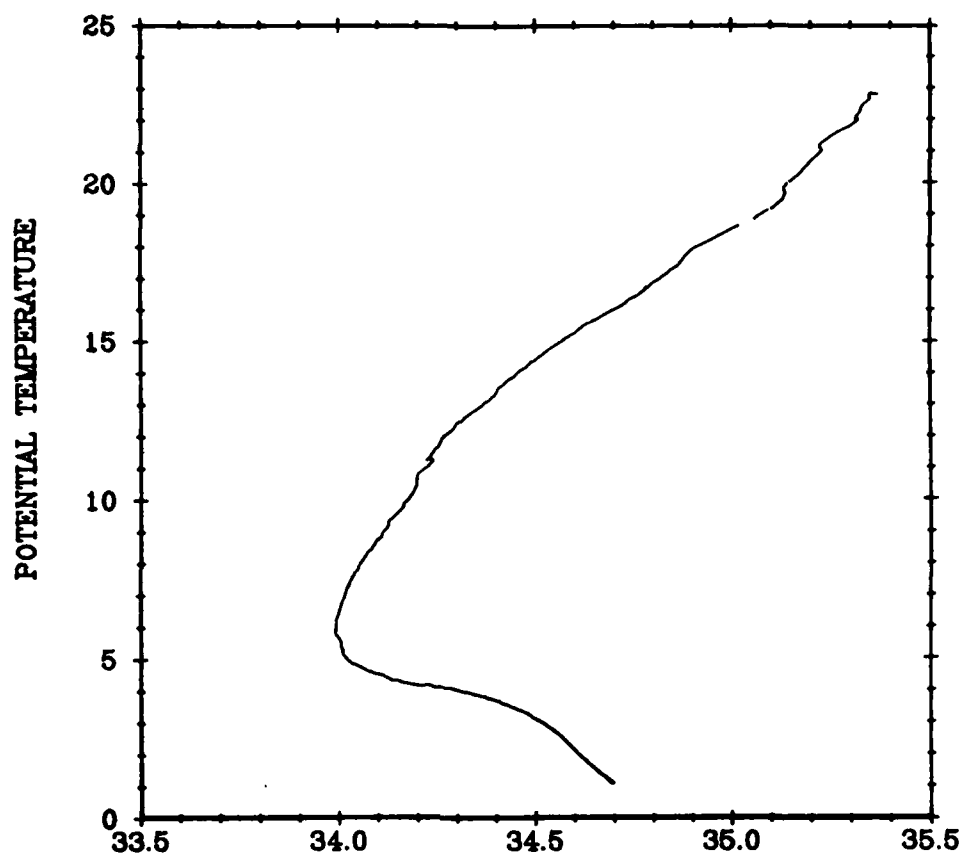
KITTEHAWAS WASHINGTON MARATHON LEG 11 STATION 11

LATITUDE LONGITUDE MO DY YR START TIME SUTTER WIND SPEED AIR TEMP AIR HUM BAROM  
29 42 5N 142 0 0W 5 11 84 442 5572 100 20 20 70 70 70 70

STATION	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC H	DEPTH
DB	DEG C		DEG C						M
20	22 401	35 350	22 269	24 249	32 402	40 402	48 402	100	1
21	22 273	35 320	22 269	24 249	32 402	40 402	48 402	100	1
22	21 825	35 294	21 825	24 249	32 402	40 402	48 402	100	1
23	21 163	35 173	21 163	24 249	32 402	40 402	48 402	100	1
24	19 403	35 123	19 403	24 249	32 402	40 402	48 402	100	1
25	18 154	34 941	18 154	24 249	32 402	40 402	48 402	100	1
26	16 890	34 677	16 890	24 249	32 402	40 402	48 402	100	1
27	15 571	34 419	15 571	24 249	32 402	40 402	48 402	100	1
28	13 107	34 274	13 107	24 249	32 402	40 402	48 402	100	1
29	11 101	34 227	11 101	24 249	32 402	40 402	48 402	100	1
30	10 608	34 135	10 608	24 249	32 402	40 402	48 402	100	1
31	9 781	34 132	9 781	24 249	32 402	40 402	48 402	100	1
32	8 435	34 139	8 435	24 249	32 402	40 402	48 402	100	1
33	7 462	34 129	7 462	24 249	32 402	40 402	48 402	100	1
34	6 945	34 989	6 945	24 249	32 402	40 402	48 402	100	1
35	4 691	34 152	4 691	24 249	32 402	40 402	48 402	100	1
36	4 195	34 137	4 195	24 249	32 402	40 402	48 402	100	1
37	3 997	34 135	3 997	24 249	32 402	40 402	48 402	100	1
38	3 123	34 139	3 123	24 249	32 402	40 402	48 402	100	1
39	3 498	34 456	3 498	24 249	32 402	40 402	48 402	100	1
40	3 259	34 487	3 259	24 249	32 402	40 402	48 402	100	1
41	3 169	34 132	3 169	24 249	32 402	40 402	48 402	100	1
42	2 889	34 136	2 889	24 249	32 402	40 402	48 402	100	1
43	2 724	34 134	2 724	24 249	32 402	40 402	48 402	100	1
44	2 598	34 137	2 598	24 249	32 402	40 402	48 402	100	1
45	2 431	34 131	2 431	24 249	32 402	40 402	48 402	100	1
46	2 284	34 133	2 284	24 249	32 402	40 402	48 402	100	1
47	2 161	34 134	2 161	24 249	32 402	40 402	48 402	100	1
48	2 055	34 131	2 055	24 249	32 402	40 402	48 402	100	1
49	1 944	34 131	1 944	24 249	32 402	40 402	48 402	100	1
50	1 877	34 132	1 877	24 249	32 402	40 402	48 402	100	1
51	1 809	34 136	1 809	24 249	32 402	40 402	48 402	100	1
52	1 759	34 131	1 759	24 249	32 402	40 402	48 402	100	1
53	1 709	34 131	1 709	24 249	32 402	40 402	48 402	100	1
54	1 674	34 132	1 674	24 249	32 402	40 402	48 402	100	1
55	1 632	34 135	1 632	24 249	32 402	40 402	48 402	100	1
56	1 597	34 139	1 597	24 249	32 402	40 402	48 402	100	1
57	1 578	34 132	1 578	24 249	32 402	40 402	48 402	100	1
58	1 552	34 136	1 552	24 249	32 402	40 402	48 402	100	1
59	1 535	34 139	1 535	24 249	32 402	40 402	48 402	100	1
60	1 522	34 131	1 522	24 249	32 402	40 402	48 402	100	1
61	1 512	34 133	1 512	24 249	32 402	40 402	48 402	100	1
62	1 504	34 135	1 504	24 249	32 402	40 402	48 402	100	1
63	1 497	34 138	1 497	24 249	32 402	40 402	48 402	100	1
64	1 486	34 139	1 486	24 249	32 402	40 402	48 402	100	1
65	1 482	34 131	1 482	24 249	32 402	40 402	48 402	100	1
66	1 483	34 132	1 483	24 249	32 402	40 402	48 402	100	1
67	1 481	34 133	1 481	24 249	32 402	40 402	48 402	100	1
68	1 480	34 134	1 480	24 249	32 402	40 402	48 402	100	1
69	1 479	34 135	1 479	24 249	32 402	40 402	48 402	100	1
70	1 481	34 136	1 481	24 249	32 402	40 402	48 402	100	1
71	1 483	34 137	1 483	24 249	32 402	40 402	48 402	100	1
72	1 485	34 138	1 485	24 249	32 402	40 402	48 402	100	1
73	1 487	34 138	1 487	24 249	32 402	40 402	48 402	100	1
74	1 490	34 139	1 490	24 249	32 402	40 402	48 402	100	1
75	1 491	34 139	1 491	24 249	32 402	40 402	48 402	100	1
76	1 493	34 140	1 493	24 249	32 402	40 402	48 402	100	1
77	1 495	34 140	1 495	24 249	32 402	40 402	48 402	100	1
78	1 499	34 141	1 499	24 249	32 402	40 402	48 402	100	1
79	1 502	34 142	1 502	24 249	32 402	40 402	48 402	100	1
80	1 508	34 142	1 508	24 249	32 402	40 402	48 402	100	1
81	1 515	34 143	1 515	24 249	32 402	40 402	48 402	100	1
82	1 523	34 143	1 523	24 249	32 402	40 402	48 402	100	1
83	1 532	34 144	1 532	24 249	32 402	40 402	48 402	100	1
84	1 544	34 144	1 544	24 249	32 402	40 402	48 402	100	1
85	1 558	34 144	1 558	24 249	32 402	40 402	48 402	100	1
86	1 569	34 144	1 569	24 249	32 402	40 402	48 402	100	1

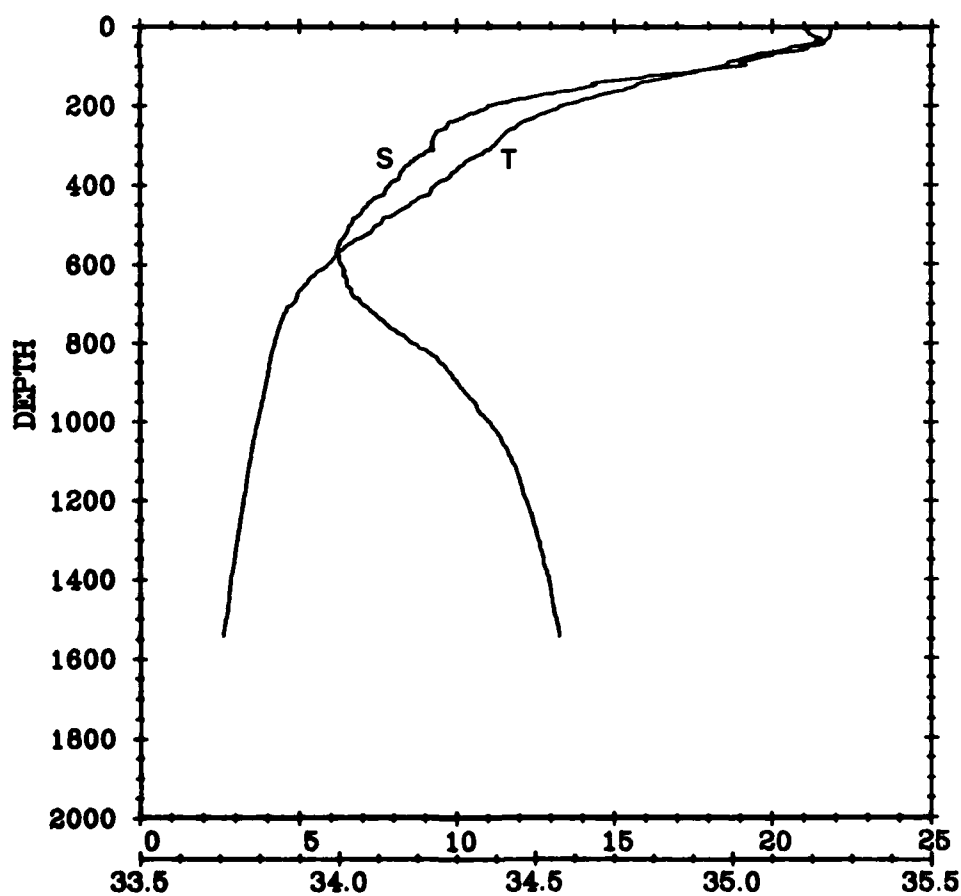
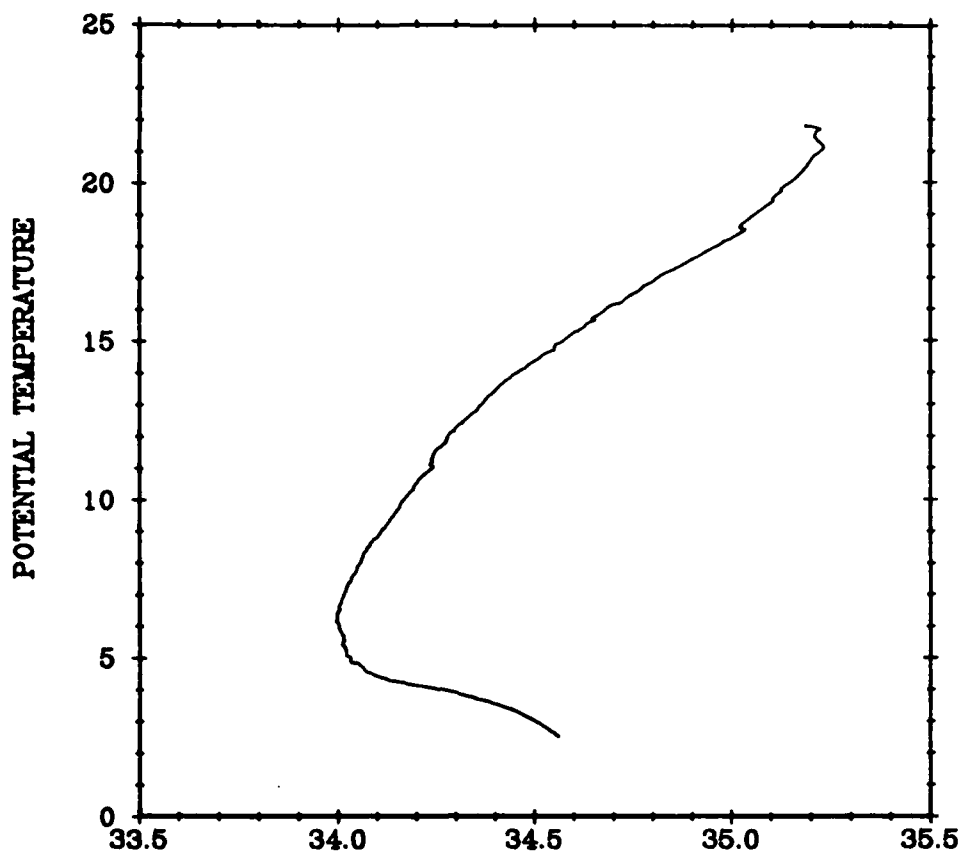
NISKIN BOTTLE DATA									
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	FUSIN
1	22 669	35 374	5 08	103 4	1 1	0 04	0 0 0 0	0 0 0 0	22 668
16	20 429	35 179	5 33	104 1	1 8	0 05	0 0 0 0	0 0 0 0	20 418
116	18 727	34 923	5 41	101 0	2 3	0 10	0 0 0 0	0 0 0 0	18 719
136	15 923	34 578	5 01	89 5	4 3	0 35	3 0 0 0	0 0 0 0	15 898
205	13 656	34 419	5 16	97 9	6 8	0 31	6 6 0 0	0 0 0 0	13 627
314	11 196	34 214	5 39	96 9	12 2	0 80	13 9 0 0	0 0 0 0	11 178
471	9 495	34 140	4 90	76 2	22 7	1 19	1 1 0 0	0 0 0 0	9 449
524	7 281	34 021	3 77	55 7	42 6	1 92	26 3 0 0	0 0 0 0	7 232
635	5 717	33 991	2 47	35 2	46 0	2 48	34 3 0 0	0 0 0 0	5 695
705	4 607	34 075	1 20	16 6	32 1	2 87	41 1 0 0	0 0 0 0	4 552
817	4 190	34 257	0 53	7 3	139 2	3 09	43 9 0 0	0 0 0 0	4 129
926	4 208	34 311	0 34	4 7	119 4	3 15	44 6 0 0	0 0 0 0	3 940
1025	3 760	34 337	0 40	5 4	126 1	3 18	44 7 0 0	0 0 0 0	3 695
1254	3 158	34 499	0 90	12 1	139 1	3 09	43 9 0 0	0 0 0 0	3 068
1503	2 678	34 556	1 34	17 8	149 3	3 02	42 9 0 0	0 0 0 0	2 572
1750	2 329	34 588	1 58	20 7	158 4	2 95	42 3 0 0	0 0 0 0	2 206
1986	2 135	34 614	1 83	23 8	166 2	2 89	41 6 0 0	0 0 0 0	1 897
2493	1 707	34 645	2 33	30 1	174 1	2 78	40 2 0 0	0 0 0 0	1 510
2993	1 550	34 645	2 83	36 4	171 9	2 68	39 0 0 0	0 0 0 0	1 129
3491	1 493	34 677	3 16	40 5	166 4	2 60	38 0 0 0	0 0 0 0	1 222
3985	1 484	34 693	3 38	43 2	161 2	2 55	37 4 0 0	0 0 0 0	1 150
4490	1 487	34 687	3 44	43 9			36 7 0 0	0 0 0 0	1 124
4994	1 505	34 689	3 57	45 5	154 8	2 48	36 7 0 0	0 0 0 0	1 060
5579	1 569	34 691	3 74	47 7	149 3	2 48	36 2 0 0	0 0 0 0	1 045

# MARATHON 2 STA. 22



NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS #2	CH DAT	SIG1	P04	W04	N04	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	CELS	PSS	M/L	°	OW/L	MM/L	MM/L	MM/L	TUBIN	CELS				DB
3	21.791	34.265	5.102	1	102.1	2.9	1.15	1.1	1.1	21.792	24.175	32.111	40.917	1.0
53	20.419	35.193	5.313	1	102.1	2.9	1.15	1.1	1.1	20.423	24.199	32.224	40.929	1.0
102	18.107	35.110	6.111	1	102.1	2.9	1.15	1.1	1.1	18.108	24.152	31.955	40.929	1.0
145	16.114	34.112	5.319	1	97.1	1.7	1.12	1.1	1.1	16.116	24.128	31.829	40.910	1.0
169	14.112	34.495	5.112	3	95.5	1.6	1.52	1.9	1.1	14.117	25.125	34.171	42.941	1.0
171	14.118	34.167	5.112	9	91.3	1.4	1.41	1.1	1.1	14.120	25.179	34.371	44.927	1.0
243	11.411	34.273	5.410	9	87.1	1.3	1.1	1.2	1.1	11.419	26.136	34.719	47.116	1.0
281	10.192	34.245	5.414	9	89.2	1.2	1.13	1.1	1.1	10.196	26.125	34.691	47.113	1.0
397	4.124	34.192	4.911	1	77.1	27.2	1.13	1.1	1.1	4.127	26.147	35.213	47.101	1.0
441	3.149	34.142	4.210	62.3	16.4	1.46	1.1	1.1	1.1	3.151	26.161	35.498	44.117	1.0
519	1.114	33.993	2.910	41.1	18.9	2.27	1.2	1.1	1.1	1.116	26.150	35.531	44.117	1.0
713	0.155	34.131	1.112	24.1	19.2	2.12	1.9	1.1	1.1	0.157	26.117	35.962	44.117	1.0
771	0.125	34.133	0.94	11.1	12.0	1.12	4.6	1.1	1.1	0.127	26.169	36.159	44.846	1.0
369	1.992	34.295	0.35	4.9	12.9	1.19	4.4	1.1	1.1	1.997	27.225	36.111	44.111	1.0
364	3.115	34.162	1.12	4.4	12.0	1.1	4.4	1.1	1.1	3.116	27.113	36.410	44.111	1.0
1213	3.127	34.496	1.11	11.3	13.1	1.1	4.4	1.1	1.1	3.131	27.479	36.628	45.169	1.0
1444	2.595	34.152	1.16	18.0	15.4	2.99	4.2	1.1	1.1	2.599	28.181	36.159	45.169	1.0

# MARATHON 2 STA. 23



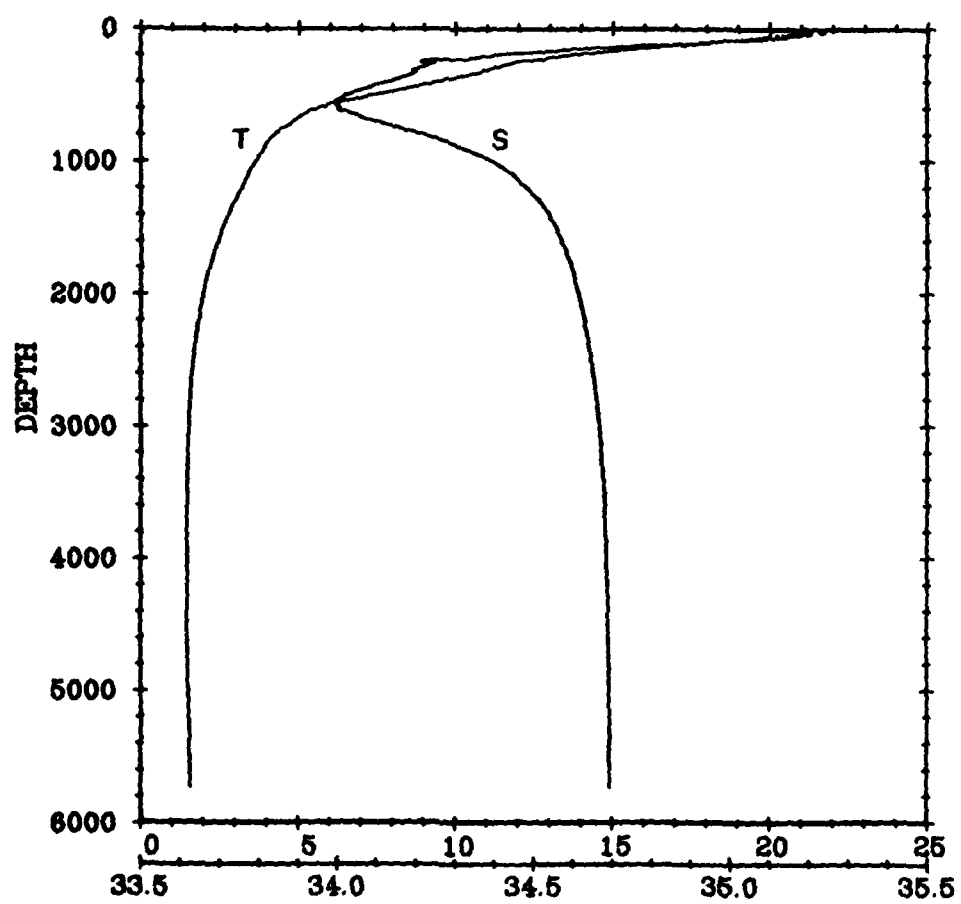
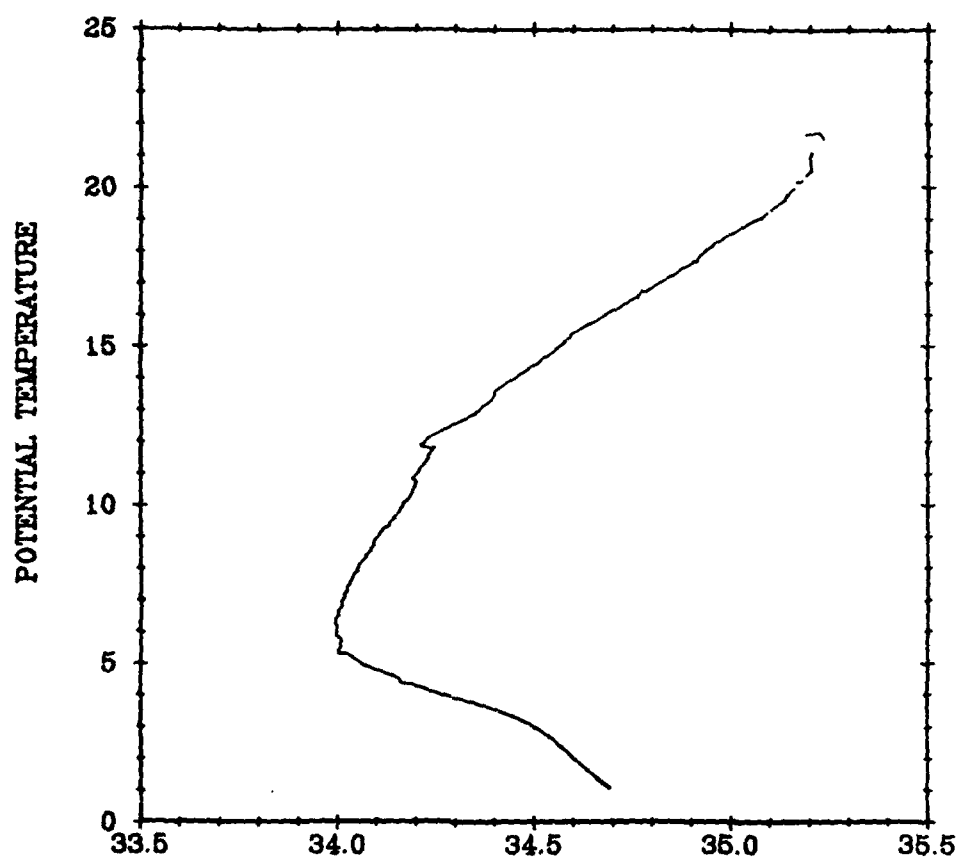
LATITUDE 14 11 N LONGITUDE 114 12 W DATE 12 44 TIME 2105 WIND 163 WIND DIR 47 WIND SPEED 20 WIND UNIT 20 WIND TYPE 20 WIND HULL 20 WIND PAR 11

PRECIP	TEMP	SALINITY	PWT TEMP	SIGMA 0	SIGMA 1	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DB		DB						
20	21.10	35.119	20.10	24.479	32.856	40.842	44.520	0.100	0
20	21.10	35.120	20.10	24.482	32.857	40.843	44.521	0.100	1
20	21.10	35.121	20.10	24.485	32.858	40.844	44.522	0.100	2
20	21.10	35.122	20.10	24.488	32.859	40.845	44.523	0.100	3
20	21.10	35.123	20.10	24.491	32.860	40.846	44.524	0.100	4
20	21.10	35.124	20.10	24.494	32.861	40.847	44.525	0.100	5
20	21.10	35.125	20.10	24.497	32.862	40.848	44.526	0.100	6
20	21.10	35.126	20.10	24.500	32.863	40.849	44.527	0.100	7
20	21.10	35.127	20.10	24.503	32.864	40.850	44.528	0.100	8
20	21.10	35.128	20.10	24.506	32.865	40.851	44.529	0.100	9
20	21.10	35.129	20.10	24.509	32.866	40.852	44.530	0.100	10
20	21.10	35.130	20.10	24.512	32.867	40.853	44.531	0.100	11
20	21.10	35.131	20.10	24.515	32.868	40.854	44.532	0.100	12
20	21.10	35.132	20.10	24.518	32.869	40.855	44.533	0.100	13
20	21.10	35.133	20.10	24.521	32.870	40.856	44.534	0.100	14
20	21.10	35.134	20.10	24.524	32.871	40.857	44.535	0.100	15
20	21.10	35.135	20.10	24.527	32.872	40.858	44.536	0.100	16
20	21.10	35.136	20.10	24.530	32.873	40.859	44.537	0.100	17
20	21.10	35.137	20.10	24.533	32.874	40.860	44.538	0.100	18
20	21.10	35.138	20.10	24.536	32.875	40.861	44.539	0.100	19
20	21.10	35.139	20.10	24.539	32.876	40.862	44.540	0.100	20
20	21.10	35.140	20.10	24.542	32.877	40.863	44.541	0.100	21
20	21.10	35.141	20.10	24.545	32.878	40.864	44.542	0.100	22
20	21.10	35.142	20.10	24.548	32.879	40.865	44.543	0.100	23
20	21.10	35.143	20.10	24.551	32.880	40.866	44.544	0.100	24
20	21.10	35.144	20.10	24.554	32.881	40.867	44.545	0.100	25
20	21.10	35.145	20.10	24.557	32.882	40.868	44.546	0.100	26
20	21.10	35.146	20.10	24.560	32.883	40.869	44.547	0.100	27
20	21.10	35.147	20.10	24.563	32.884	40.870	44.548	0.100	28
20	21.10	35.148	20.10	24.566	32.885	40.871	44.549	0.100	29
20	21.10	35.149	20.10	24.569	32.886	40.872	44.550	0.100	30
20	21.10	35.150	20.10	24.572	32.887	40.873	44.551	0.100	31
20	21.10	35.151	20.10	24.575	32.888	40.874	44.552	0.100	32
20	21.10	35.152	20.10	24.578	32.889	40.875	44.553	0.100	33
20	21.10	35.153	20.10	24.581	32.890	40.876	44.554	0.100	34
20	21.10	35.154	20.10	24.584	32.891	40.877	44.555	0.100	35
20	21.10	35.155	20.10	24.587	32.892	40.878	44.556	0.100	36
20	21.10	35.156	20.10	24.590	32.893	40.879	44.557	0.100	37
20	21.10	35.157	20.10	24.593	32.894	40.880	44.558	0.100	38
20	21.10	35.158	20.10	24.596	32.895	40.881	44.559	0.100	39
20	21.10	35.159	20.10	24.599	32.896	40.882	44.560	0.100	40
20	21.10	35.160	20.10	24.602	32.897	40.883	44.561	0.100	41
20	21.10	35.161	20.10	24.605	32.898	40.884	44.562	0.100	42
20	21.10	35.162	20.10	24.608	32.899	40.885	44.563	0.100	43
20	21.10	35.163	20.10	24.611	32.900	40.886	44.564	0.100	44
20	21.10	35.164	20.10	24.614	32.901	40.887	44.565	0.100	45
20	21.10	35.165	20.10	24.617	32.902	40.888	44.566	0.100	46
20	21.10	35.166	20.10	24.620	32.903	40.889	44.567	0.100	47
20	21.10	35.167	20.10	24.623	32.904	40.890	44.568	0.100	48
20	21.10	35.168	20.10	24.626	32.905	40.891	44.569	0.100	49
20	21.10	35.169	20.10	24.629	32.906	40.892	44.570	0.100	50
20	21.10	35.170	20.10	24.632	32.907	40.893	44.571	0.100	51
20	21.10	35.171	20.10	24.635	32.908	40.894	44.572	0.100	52
20	21.10	35.172	20.10	24.638	32.909	40.895	44.573	0.100	53
20	21.10	35.173	20.10	24.641	32.910	40.896	44.574	0.100	54
20	21.10	35.174	20.10	24.644	32.911	40.897	44.575	0.100	55
20	21.10	35.175	20.10	24.647	32.912	40.898	44.576	0.100	56
20	21.10	35.176	20.10	24.650	32.913	40.899	44.577	0.100	57
20	21.10	35.177	20.10	24.653	32.914	40.900	44.578	0.100	58
20	21.10	35.178	20.10	24.656	32.915	40.901	44.579	0.100	59
20	21.10	35.179	20.10	24.659	32.916	40.902	44.580	0.100	60
20	21.10	35.180	20.10	24.662	32.917	40.903	44.581	0.100	61
20	21.10	35.181	20.10	24.665	32.918	40.904	44.582	0.100	62
20	21.10	35.182	20.10	24.668	32.919	40.905	44.583	0.100	63
20	21.10	35.183	20.10	24.671	32.920	40.906	44.584	0.100	64
20	21.10	35.184	20.10	24.674	32.921	40.907	44.585	0.100	65
20	21.10	35.185	20.10	24.677	32.922	40.908	44.586	0.100	66
20	21.10	35.186	20.10	24.680	32.923	40.909	44.587	0.100	67
20	21.10	35.187	20.10	24.683	32.924	40.910	44.588	0.100	68
20	21.10	35.188	20.10	24.686	32.925	40.911	44.589	0.100	69
20	21.10	35.189	20.10	24.689	32.926	40.912	44.590	0.100	70
20	21.10	35.190	20.10	24.692	32.927	40.913	44.591	0.100	71
20	21.10	35.191	20.10	24.695	32.928	40.914	44.592	0.100	72
20	21.10	35.192	20.10	24.698	32.929	40.915	44.593	0.100	73
20	21.10	35.193	20.10	24.701	32.930	40.916	44.594	0.100	74
20	21.10	35.194	20.10	24.704	32.931	40.917	44.595	0.100	75
20	21.10	35.195	20.10	24.707	32.932	40.918	44.596	0.100	76
20	21.10	35.196	20.10	24.710	32.933	40.919	44.597	0.100	77
20	21.10	35.197	20.10	24.713	32.934	40.920	44.598	0.100	78
20	21.10	35.198	20.10	24.716	32.935	40.921	44.599	0.100	79
20	21.10	35.199	20.10	24.719	32.936	40.922	44.600	0.100	80

WESKIN BUTTLE DATA													
DEPTH	TEMP	SALINITY	DOS 4	2 BAT	SIGMA 0	PWT	N 100	TRIT	PWT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML		ML	DB	ML	TORIN	DEG C				DB
1	20.164	35.119	20.16	24.479	32.856	40.842	44.520	0.100	20.164	35.119	32.856	40.842	1
2	20.164	35.120	20.16	24.482	32.857	40.843	44.521	0.100	20.164	35.120	32.857	40.843	2
3	20.164	35.121	20.16	24.485	32.858	40.844	44.522	0.100	20.164	35.121	32.858	40.844	3
4	20.164	35.122	20.16	24.488	32.859	40.845	44.523	0.100	20.164	35.122	32.859	40.845	4
5	20.164	35.123	20.16	24.491	32.860	40.846	44.524	0.100	20.164	35.123	32.860	40.846	5
6	20.164	35.124	20.16	24.494	32.861	40.847	44.525	0.100	20.164	35.124	32.861	40.847	6
7	20.164	35.125	20.16	24.497	32.862	40.848	44.526	0.100	20.164	35.125	32.862	40.848	7
8	20.164	35.126	20.16	24.500	32.863	40.849	44.527	0.100	20.164	35.126	32.863	40.849	8
9	20.164	35.127	20.16	24.503	32.864	40.850	44.528	0.100	20.164	35.127	32.864	40.850	9
10	20.164	35.128	20.16	24.506	32.865	40.851	44.529	0.100	20.164	35.128	32.865	40.851	10
11	20.164	35.129	20.16	24.509	32.866	40.852	44.530	0.100	20.164	35.129	32.866	40.852	11
12	20.164	35.130	20.16	24.512	32.867	40.853	44.531	0.100	20.164	35.130	32.867	40.853	12
13	20.164	35.131	20.16	24.515	32.868	40.854	44.532	0.100	20.164	35.131	32.868	40.854	13
14	20.164	35.132	20.16	24.518	32.869	40.855	44.533	0.100	20.164	35.132	32.869	40.855	14
15	20.164	35.133	20.16	24.521	32.870	40.856	44.534	0.100	20.164	35.133	32.870	40.856	15
16	20.164	35.134	20.16	24.524	32.871	40.857	44.535	0.100	20.164	35.134	32.871	40.857	16
17	20.164	35.135	20.16	24.527	32.872	40.858	44.536	0.100	20.164	35.135	32.872	40.858	17
18	20.164	35.136	20.16	24.530	32.873	40.859	44.537	0.100	20.164	35.136	32.873	40.859	18
19	20.164	35.137	20.16	24.533	32.874	40.860	44.538	0.100	20.164	35.137	32.874	40.860	19
20	20.164	35.138	20.16	24.536	32.875	40.861	44.539	0.100	20.164	35.138	32.875	40.861	20
21	20.164	35.139	20.16	24.539	32.876	40.862	44.540	0.100	20.164	35.139	32.876	40.862	21
22	20.164	35.140	20.16	24.542	32.877	40.863	44.541	0.100	20.164	35.140	32.877	40.863	22
23	20.164	35.141	20.16	24.545	32.878	40.864	44.542	0.100	20.164	35.141	32.878	40.864	23
24	20.164	35.142	20.16	24.548	32.879	40.865	44.543	0.100	20.164	35.142	32.879	40.865	24



# MARATHON 2 STA. 24

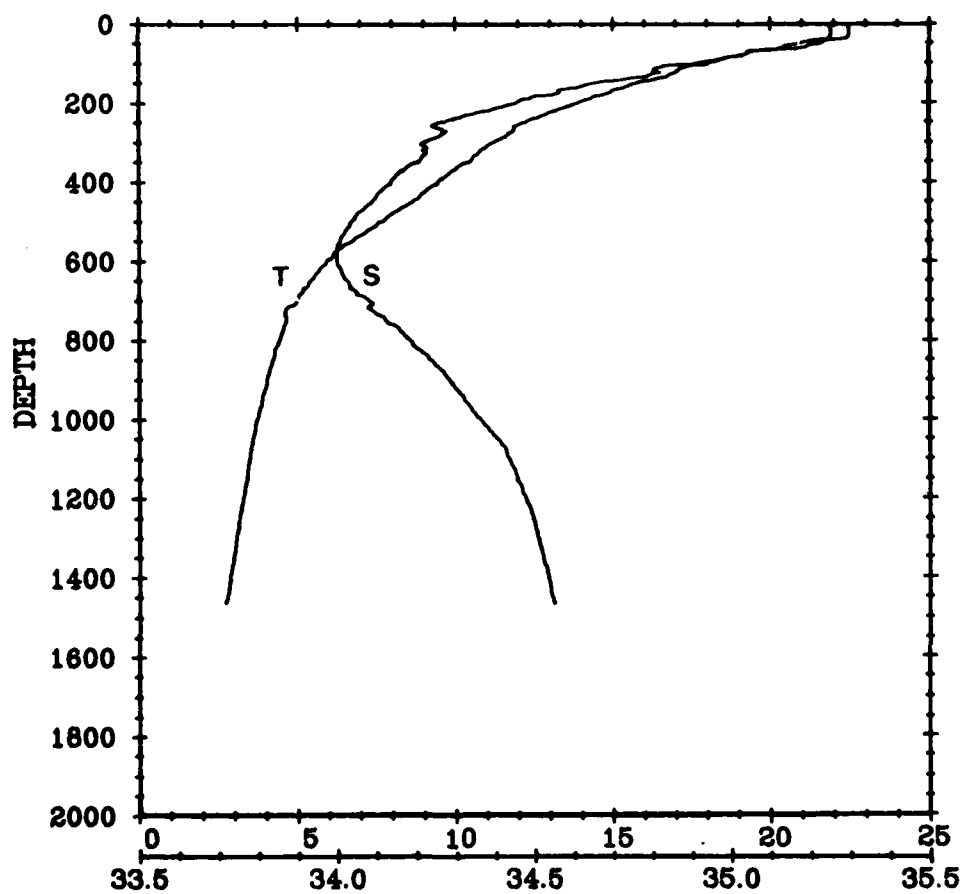
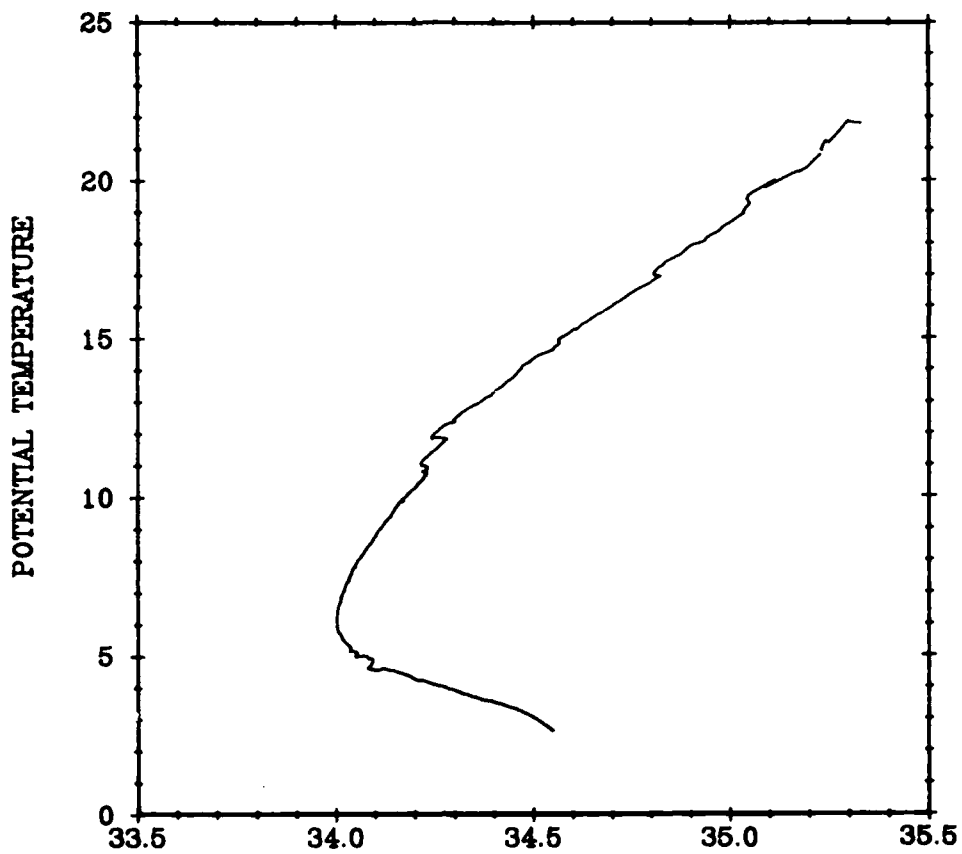


LATITUDE	LONGITUDE	MAY YR	START TIME	A TIME	WIND DIR	SPEED KT	AIR TEMP DEG F	WET BULB DEG F	SEA H FT
17-00N	126-00E	89-04	04-00	16	0	0	81	75	0

PRESS	TEMP	SALINITY	ST. TEMP	SIGMA T	SIGMA T	SIGMA T	SIGMA T	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				KG/CM <sup>3</sup>		M
2.0	4.147	35.135	24.912	24.439	22.874	21.310	19.745	0.100	0.0
2.0	4.149	35.245	24.932	24.477	22.952	21.397	19.819	0.100	0.1
4.0	4.210	35.357	25.009	24.552	23.034	21.477	19.894	0.100	0.2
6.0	4.274	35.464	25.084	24.616	23.107	21.552	19.969	0.100	0.3
8.0	4.341	35.572	25.165	24.685	23.184	21.630	20.044	0.100	0.4
10.0	4.412	35.681	25.249	24.759	23.264	21.710	20.120	0.100	0.5
12.0	4.486	35.791	25.335	24.837	23.347	21.792	20.197	0.100	0.6
14.0	4.563	35.901	25.422	24.917	23.432	21.876	20.275	0.100	0.7
16.0	4.643	36.012	25.511	24.999	23.519	21.962	20.354	0.100	0.8
18.0	4.725	36.124	25.601	25.083	23.608	22.050	20.434	0.100	0.9
20.0	4.810	36.237	25.692	25.169	23.699	22.140	20.515	0.100	1.0
22.0	4.897	36.351	25.785	25.257	23.792	22.232	20.597	0.100	1.1
24.0	4.987	36.466	25.880	25.347	23.887	22.326	20.680	0.100	1.2
26.0	5.079	36.581	25.981	25.439	23.984	22.422	20.764	0.100	1.3
28.0	5.173	36.697	26.084	25.533	24.083	22.520	20.850	0.100	1.4
30.0	5.269	36.814	26.189	25.629	24.184	22.620	20.937	0.100	1.5
32.0	5.367	36.931	26.296	25.727	24.287	22.722	21.026	0.100	1.6
34.0	5.467	37.049	26.405	25.827	24.392	22.826	21.116	0.100	1.7
36.0	5.568	37.168	26.516	25.929	24.499	22.932	21.207	0.100	1.8
38.0	5.671	37.288	26.629	26.033	24.608	23.040	21.300	0.100	1.9
40.0	5.775	37.409	26.744	26.139	24.719	23.150	21.394	0.100	2.0
42.0	5.881	37.531	26.861	26.247	24.832	23.262	21.490	0.100	2.1
44.0	5.988	37.654	26.981	26.357	24.947	23.376	21.587	0.100	2.2
46.0	6.096	37.778	27.102	26.469	25.064	23.492	21.686	0.100	2.3
48.0	6.206	37.903	27.225	26.583	25.182	23.610	21.786	0.100	2.4
50.0	6.317	38.029	27.350	26.700	25.302	23.730	21.888	0.100	2.5
52.0	6.430	38.156	27.477	26.819	25.424	23.852	21.991	0.100	2.6
54.0	6.544	38.284	27.606	26.940	25.548	23.976	22.096	0.100	2.7
56.0	6.660	38.413	27.737	27.063	25.674	24.102	22.202	0.100	2.8
58.0	6.777	38.543	27.870	27.189	25.802	24.230	22.310	0.100	2.9
60.0	6.895	38.674	28.005	27.317	25.932	24.360	22.420	0.100	3.0

WINDSON BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 02	02 SAT	DIG 03	P04	N03	N02	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PROMO	ML		PROMO	MM L	MM L	MM L	MM L	DEG C				DB
0	20.49	35.244	5.03	102.9	0.00	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
1	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
2	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
3	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
4	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
5	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
6	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
7	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
8	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
9	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
10	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
11	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
12	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
13	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
14	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
15	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
16	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
17	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
18	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
19	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
20	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
21	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
22	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
23	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
24	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
25	20.451	35.192	5.07	103.1	0.0	1.03	0.0	0.0	0.0	21.99	24.479	32.370	40.901	0.0
26	20.451	35.192	5.07	103.1										

# MARATHON 2 STA. 25

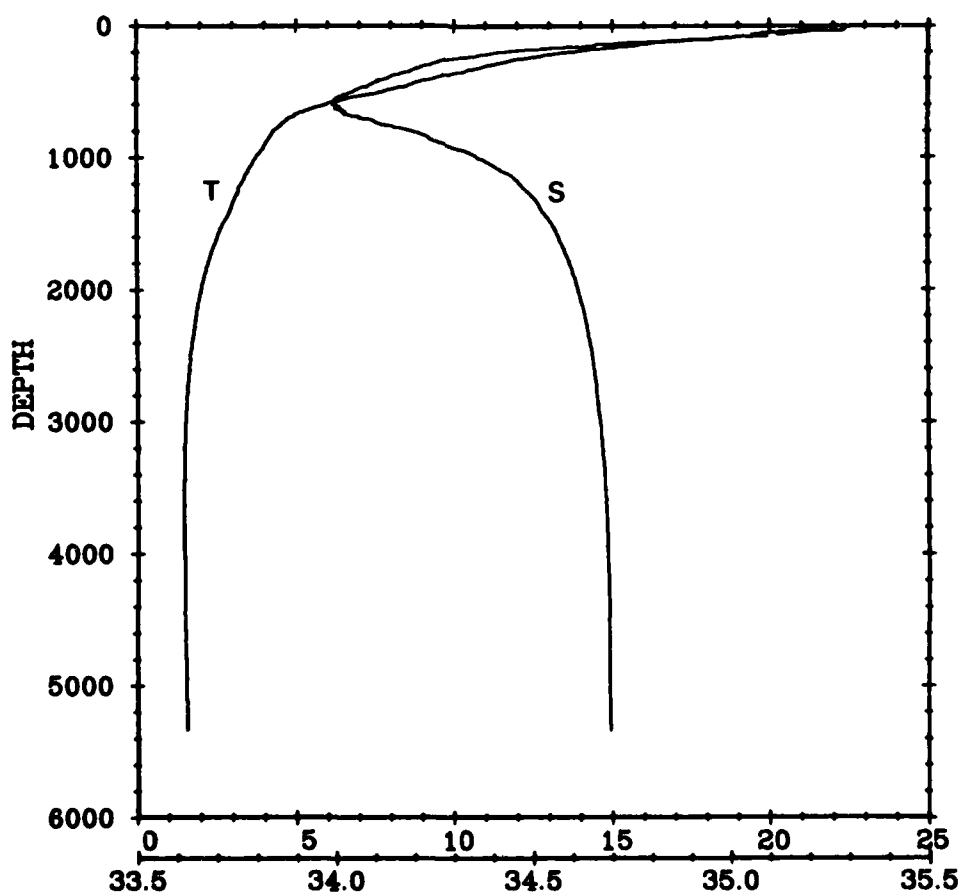
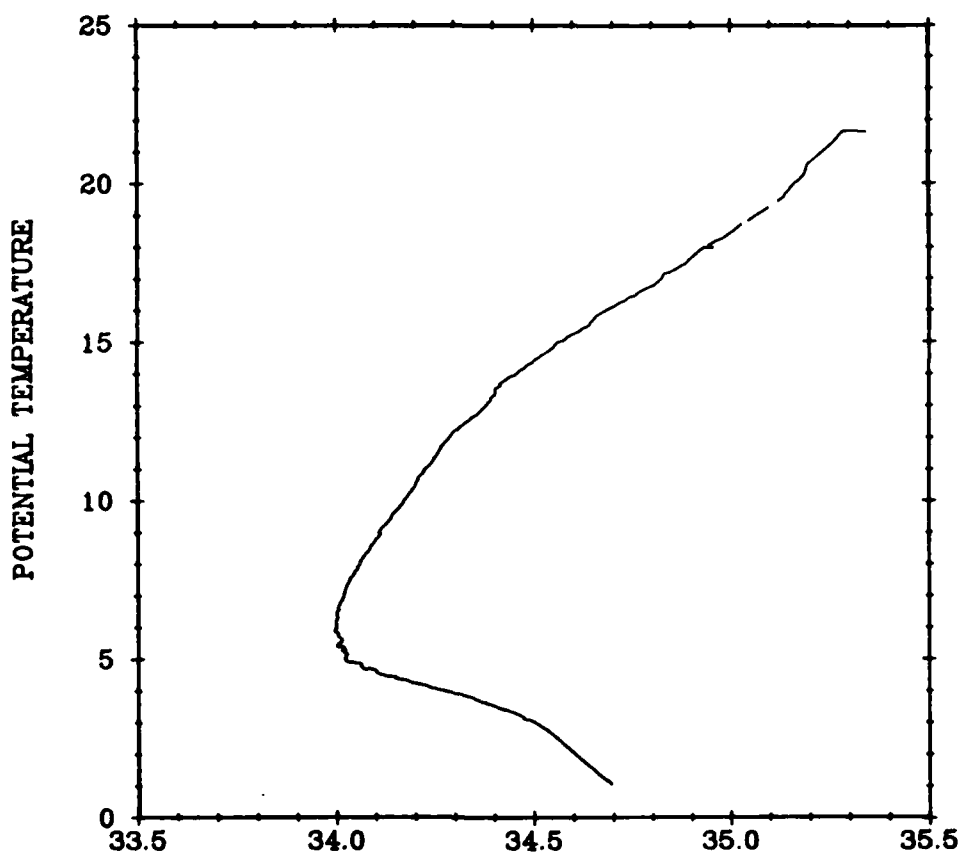


LATITUDE LONGITUDE MO DAY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB DRY BULB  
 11 4 5N 162 1 3N 11 11 013 101 10 19 19.9 19.9 19.9 19.9

STD DATA		POT TEMP	SIGMA 0	SIGMA 1	SIGMA 4	SIGMA 10	DYNAMIC HT	DEPTH
PRESS	TEMP	DEG C	KG/M3	KG/M3	KG/M3	KG/M3	CM	M
DB	DEG C							
1	21.681	16.101	21.681	24.146	12.143	47.479	138.101	1
20	21.675	16.101	21.675	24.152	12.143	47.465	140.101	10
40	21.124	16.142	21.124	24.148	12.151	47.114	129.878	19
60	19.892	16.101	19.892	24.161	12.153	47.151	127.103	29
80	19.177	16.170	19.177	25.142	12.14	47.153	125.102	39
100	18.103	16.167	18.103	25.102	12.104	47.149	123.128	49
120	16.745	16.164	16.720	25.142	12.115	47.138	123.178	59
140	15.757	16.125	15.729	25.101	12.101	47.163	124.189	69
160	12.243	16.115	12.211	26.101	12.147	47.188	125.110	79
180	11.225	16.114	11.189	26.149	12.122	47.119	126.189	89
200	10.109	16.189	10.082	26.201	12.181	47.113	126.103	99
220	9.437	16.114	9.392	26.317	12.225	47.185	127.214	109
240	8.401	16.190	8.371	26.454	12.153	47.146	127.104	119
260	7.804	16.149	7.764	26.558	12.187	47.118	127.101	129
280	5.957	16.199	5.920	26.714	12.191	47.114	127.101	139
300	4.328	16.162	4.284	26.957	12.124	47.112	127.102	149
320	4.101	16.191	4.054	27.115	12.105	47.112	127.109	159
340	4.145	16.179	4.094	27.212	12.115	47.114	127.101	169
360	1.554	16.158	1.502	27.318	12.125	47.117	127.101	179
380	1.525	16.118	1.473	27.392	12.109	47.113	127.101	189
400	1.293	16.165	1.241	27.438	12.109	47.113	127.101	199
420	1.216	16.158	1.164	27.482	12.101	47.114	127.101	209
440	0.943	16.122	0.941	27.518	12.109	47.113	127.101	219
460	2.115	16.145	2.032	27.555	12.125	47.115	127.101	229
480	2.149	16.161	2.039	27.586	12.155	47.115	127.101	239
500	2.134	16.179	2.077	27.601	12.151	47.113	127.101	249
520	2.050	16.191	2.128	27.614	12.115	47.115	127.101	259
540	2.115	16.100	2.085	27.652	12.155	47.143	127.101	269
560	2.026	16.102	1.989	27.670	12.174	47.115	127.101	279
580	1.940	16.101	1.894	27.694	12.193	47.115	127.101	289
600	1.861	16.109	1.810	27.697	12.123	47.123	127.101	299
620	1.811	16.114	1.742	27.714	12.111	47.141	127.101	309
640	1.743	16.142	1.678	27.717	12.143	47.117	127.101	319
660	1.689	16.144	1.614	27.728	12.157	47.114	127.101	329
680	1.672	16.171	1.569	27.734	12.164	47.115	127.101	339
700	1.610	16.156	1.424	27.741	12.174	47.115	127.101	349
720	1.577	16.151	1.377	27.747	12.184	47.115	127.101	359
740	1.555	16.154	1.344	27.752	12.191	47.115	127.101	369
760	1.525	16.167	1.309	27.757	12.198	47.115	127.101	379
780	1.501	16.170	1.275	27.761	12.194	47.115	127.101	389
800	1.487	16.173	1.251	27.766	12.117	47.140	127.101	399
820	1.474	16.175	1.229	27.769	12.114	47.145	127.101	409
840	1.460	16.179	1.207	27.774	12.120	47.153	127.101	419
860	1.458	16.180	1.193	27.775	12.122	47.155	127.101	429
880	1.449	16.182	1.174	27.778	12.125	47.161	127.101	439
900	1.449	16.181	1.163	27.780	12.129	47.164	127.101	449
920	1.449	16.185	1.154	27.782	12.132	47.167	127.101	459
940	1.450	16.185	1.143	27.783	12.133	47.169	127.101	469
960	1.455	16.185	1.137	27.784	12.134	47.170	127.101	479
980	1.460	16.187	1.131	27.785	12.135	47.172	127.101	489
1000	1.465	16.187	1.125	27.786	12.136	47.173	127.101	499
1020	1.471	16.189	1.120	27.787	12.138	47.175	127.101	509
1040	1.477	16.189	1.114	27.788	12.139	47.177	127.101	519
1060	1.480	16.189	1.108	27.789	12.140	47.178	127.101	529
1080	1.491	16.190	1.105	27.789	12.141	47.179	127.101	539
1100	1.499	16.191	1.101	27.790	12.142	47.181	127.101	549
1120	1.508	16.191	1.097	27.790	12.143	47.181	127.101	559
1140	1.517	16.192	1.094	27.791	12.143	47.182	127.101	569
1160	1.525	16.191	1.090	27.792	12.144	47.183	127.101	579
1180	1.533	16.192	1.085	27.792	12.145	47.184	127.101	589
1200	1.541	16.192	1.081	27.792	12.146	47.185	127.101	599
1220	1.548	16.192	1.072	27.793	12.147	47.187	127.101	609
1240	1.553	16.193	1.067	27.794	12.148	47.189	127.101	619
1260	1.557	16.193	1.066	27.794	12.149	47.189	127.101	629

NISKIN BOTTLE DATA		POT TEMP	SIGMA 0	SIGMA 1	SIGMA 4	PRESS
DEPTH	TEMP	DEG C	KG/M3	KG/M3	KG/M3	DB
1	21.612	16.293	21.612	24.150	12.148	1
16	19.996	16.162	19.996	24.190	12.133	56
106	17.123	16.169	17.123	24.118	12.185	176
102	16.197	16.143	16.197	24.170	12.170	162
202	14.443	16.174	14.443	24.151	12.193	202
300	11.101	16.150	11.101	24.111	12.189	300
406	9.279	16.121	9.279	24.193	12.149	406
499	7.146	16.135	7.146	24.182	12.151	502
591	5.788	16.192	5.788	24.192	12.181	604
693	4.187	16.166	4.187	24.165	12.133	698
800	4.289	16.198	4.289	24.125	12.116	815
908	4.013	16.192	4.013	24.229	12.135	904
977	3.713	16.154	3.713	24.103	12.141	984
1167	3.132	16.163	3.132	24.133	12.152	1176
1406	2.911	16.136	2.911	24.141	12.170	1449
1707	2.133	16.181	2.133	24.120	12.182	1733
1974	2.173	16.111	2.174	24.168	12.187	1994
2000	1.672	16.149	2.15	24.129	12.195	2029
2044	1.022	16.167	2.91	24.157	12.198	2022
2449	1.457	16.181	3.20	24.176	12.151	2499
4062	1.460	16.189	3.15	24.178	12.151	4126
4317	1.492	16.191	3.10	24.190	12.151	4613
5017	1.515	16.192	3.14	24.192	12.151	5128
5337	1.557	16.193	3.14	24.194	12.151	5437

# MARATHON 2 STA. 26



R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 11

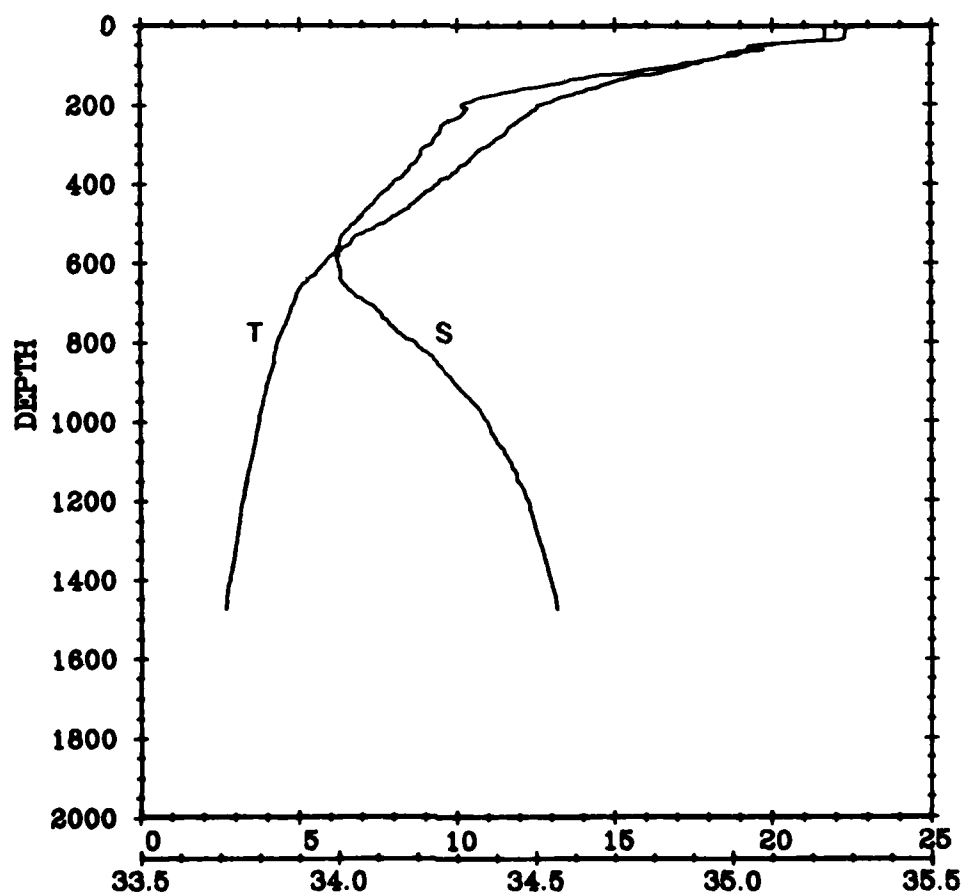
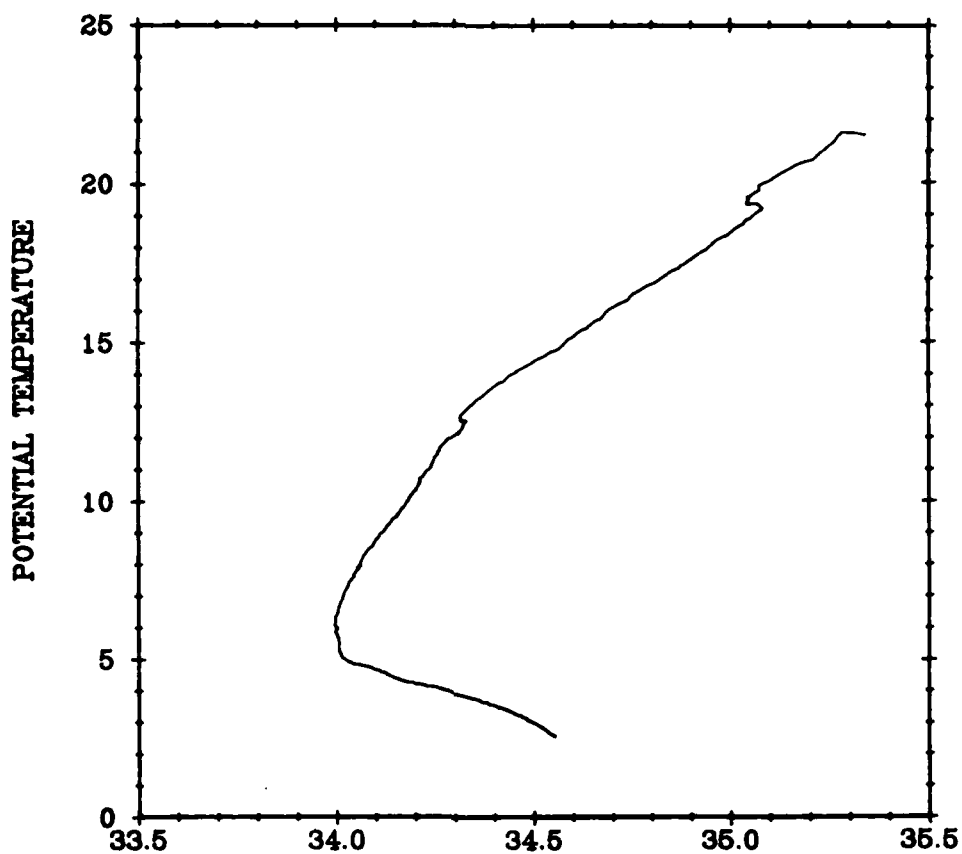
LATITUDE LONGITUDE MO DY YR START TIME BOTTOM WIND SPEED AIR TEMP WAT TEMP SURF W

24 48 112 00 W 11 11 94 1724 5 12 8 11 104.4 10.0 10.4

# WTD DATA

DEPTH	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				KG/CM <sup>3</sup>		M
1	21.410	35.323	21.410	24.198	14.471	41.947	14.927	0.00	1
2	21.440	35.281	21.439	24.134	14.472	41.971	14.929	0.00	2
3	21.457	35.285	21.449	24.085	14.477	41.987	14.931	0.00	3
5	21.481	35.273	21.472	24.047	14.483	42.002	14.934	0.00	5
10	21.514	35.278	21.495	24.181	14.587	42.027	14.932	0.00	10
15	21.576	35.304	21.559	24.128	14.764	42.071	14.931	0.00	15
20	21.640	35.341	21.624	24.091	14.925	42.093	14.931	0.00	20
25	22.114	35.322	22.112	24.125	14.975	42.106	14.932	0.00	25
30	22.517	35.272	22.515	24.161	15.012	42.117	14.933	0.00	30
35	22.917	35.235	22.915	24.175	15.034	42.123	14.933	0.00	35
40	23.262	35.193	23.261	24.184	15.077	42.129	14.934	0.00	40
45	23.424	35.141	23.424	24.134	15.203	42.163	14.933	0.00	45
50	23.547	35.141	23.547	24.063	15.314	42.187	14.933	0.00	50
55	23.634	35.141	23.634	24.114	15.402	42.204	14.933	0.00	55
60	23.695	35.134	23.695	24.099	15.477	42.214	14.933	0.00	60
65	23.735	35.134	23.735	24.099	15.547	42.224	14.933	0.00	65
70	23.765	35.134	23.765	24.099	15.614	42.234	14.933	0.00	70
75	23.785	35.134	23.785	24.099	15.677	42.244	14.933	0.00	75
80	23.805	35.134	23.805	24.099	15.744	42.254	14.933	0.00	80
85	23.825	35.134	23.825	24.099	15.814	42.264	14.933	0.00	85
90	23.845	35.134	23.845	24.099	15.884	42.274	14.933	0.00	90
95	23.865	35.134	23.865	24.099	15.954	42.284	14.933	0.00	95
100	23.885	35.134	23.885	24.099	16.024	42.294	14.933	0.00	100
105	23.905	35.134	23.905	24.099	16.094	42.304	14.933	0.00	105
110	23.925	35.134	23.925	24.099	16.164	42.314	14.933	0.00	110
115	23.945	35.134	23.945	24.099	16.234	42.324	14.933	0.00	115
120	23.965	35.134	23.965	24.099	16.304	42.334	14.933	0.00	120
125	23.985	35.134	23.985	24.099	16.374	42.344	14.933	0.00	125
130	24.005	35.134	24.005	24.099	16.444	42.354	14.933	0.00	130
135	24.025	35.134	24.025	24.099	16.514	42.364	14.933	0.00	135
140	24.045	35.134	24.045	24.099	16.584	42.374	14.933	0.00	140
145	24.065	35.134	24.065	24.099	16.654	42.384	14.933	0.00	145
150	24.085	35.134	24.085	24.099	16.724	42.394	14.933	0.00	150
155	24.105	35.134	24.105	24.099	16.794	42.404	14.933	0.00	155
160	24.125	35.134	24.125	24.099	16.864	42.414	14.933	0.00	160
165	24.145	35.134	24.145	24.099	16.934	42.424	14.933	0.00	165
170	24.165	35.134	24.165	24.099	17.004	42.434	14.933	0.00	170
175	24.185	35.134	24.185	24.099	17.074	42.444	14.933	0.00	175
180	24.205	35.134	24.205	24.099	17.144	42.454	14.933	0.00	180
185	24.225	35.134	24.225	24.099	17.214	42.464	14.933	0.00	185
190	24.245	35.134	24.245	24.099	17.284	42.474	14.933	0.00	190
195	24.265	35.134	24.265	24.099	17.354	42.484	14.933	0.00	195
200	24.285	35.134	24.285	24.099	17.424	42.494	14.933	0.00	200
205	24.305	35.134	24.305	24.099	17.494	42.504	14.933	0.00	205
210	24.325	35.134	24.325	24.099	17.564	42.514	14.933	0.00	210
215	24.345	35.134	24.345	24.099	17.634	42.524	14.933	0.00	215
220	24.365	35.134	24.365	24.099	17.704	42.534	14.933	0.00	220
225	24.385	35.134	24.385	24.099	17.774	42.544	14.933	0.00	225
230	24.405	35.134	24.405	24.099	17.844	42.554	14.933	0.00	230
235	24.425	35.134	24.425	24.099	17.914	42.564	14.933	0.00	235
240	24.445	35.134	24.445	24.099	17.984	42.574	14.933	0.00	240
245	24.465	35.134	24.465	24.099	18.054	42.584	14.933	0.00	245
250	24.485	35.134	24.485	24.099	18.124	42.594	14.933	0.00	250
255	24.505	35.134	24.505	24.099	18.194	42.604	14.933	0.00	255
260	24.525	35.134	24.525	24.099	18.264	42.614	14.933	0.00	260
265	24.545	35.134	24.545	24.099	18.334	42.624	14.933	0.00	265
270	24.565	35.134	24.565	24.099	18.404	42.634	14.933	0.00	270
275	24.585	35.134	24.585	24.099	18.474	42.644	14.933	0.00	275
280	24.605	35.134	24.605	24.099	18.544	42.654	14.933	0.00	280
285	24.625	35.134	24.625	24.099	18.614	42.664	14.933	0.00	285
290	24.645	35.134	24.645	24.099	18.684	42.674	14.933	0.00	290
295	24.665	35.134	24.665	24.099	18.754	42.684	14.933	0.00	295
300	24.685	35.134	24.685	24.099	18.824	42.694	14.933	0.00	300
305	24.705	35.134	24.705	24.099	18.894	42.704	14.933	0.00	305
310	24.725	35.134	24.725	24.099	18.964	42.714	14.933	0.00	310
315	24.745	35.134	24.745	24.099	19.034	42.724	14.933	0.00	315
320	24.765	35.134	24.765	24.099	19.104	42.734	14.933	0.00	320
325	24.785	35.134	24.785	24.099	19.174	42.744	14.933	0.00	325
330	24.805	35.134	24.805	24.099	19.244	42.754	14.933	0.00	330
335	24.825	35.134	24.825	24.099	19.314	42.764	14.933	0.00	335
340	24.845	35.134	24.845	24.099	19.384	42.774	14.933	0.00	340
345	24.865	35.134	24.865	24.099	19.454	42.784	14.933	0.00	345
350	24.885	35.134	24.885	24.099	19.524	42.794	14.933	0.00	350
355	24.905	35.134	24.905	24.099	19.594	42.804	14.933	0.00	355
360	24.925	35.134	24.925	24.099	19.664	42.814	14.933	0.00	360
365	24.945	35.134	24.945	24.099	19.734	42.824	14.933	0.00	365
370	24.965	35.134	24.965	24.099	19.804	42.834	14.933	0.00	370
375	24.985	35.134	24.985	24.099	19.874	42.844	14.933	0.00	375
380	25.005	35.134	25.005	24.099	19.944	42.854	14.933	0.00	380
385	25.025	35.134	25.025	24.099	20.014	42.864	14.933	0.00	385
390	25.045	35.134	25.045	24.099	20.084	42.874	14.933	0.00	390
395	25.065	35.134	25.065	24.099	20.154	42.884	14.933	0.00	395
400	25.085	35.134	25.085	24.099	20.224	42.894	14.933	0.00	400
405	25.105	35.134	25.105	24.099	20.294	42.904	14.933	0.00	405
410	25.125	35.134	25.125	24.099	20.364	42.914	14.933	0.00	410
415	25.145	35.134	25.145	24.099	20.434	42.924	14.933	0.00	415
420	25.165	35.134	25.165	24.099	20.504	42.934	14.933	0.00	420
425	25.185	35.134	25.185	24.099	20.574	42.944	14.933	0.00	425
430	25.205	35.134	25.205	24.099	20.644	42.954	14.933	0.00	430
435	25.225	35.134	25.225	24.099	20.714	42.964	14.933	0.00	435
440	25.245	35.134	25.245	24.099	20.784	42.974	14.933	0.00	440
445	25.265	35.134	25.265	24.099	20.854	42.984	14.933	0.00	445
450	25.285	35.134	25.285	24.099	20.924	42.994	14.933	0.00	450
455	25.305	35.134	25.305	24.099	20.994	43.004	14.933	0.00	455
460	25.325	35.134	25.325	24.099	21.064	43.014	14.933	0.00	460
465	25.345	35.134	25.345	24.099	21.134	43.024	14.933	0.00	465
470	25.365	35.134	25.365	24.099	21.204	43.034	14.933	0.00	470
475	25.385	35.134	25.385	24.099	21.274	43.044	14.933	0.00	475
480	25.405	35.134	25.405	24.099	21.344	43.054	14.933	0.00	480
485	25.425	35.134	25.425	24.099	21.414	43.064	14.933	0.00	485
490	25.445	35.134	25.445	24.099	21.484	43.074	14.933	0.00	490
495	25.465	35.134	25.465	24.099	21.554	43.084	14.933	0.00	495
500	25.485	35.134	25.485	24.099	21.624	43.094	14.933	0.00	500
505	25.505	35.134	25.505	24.099	21.694	43.104	14.933	0.00	505
510	25.525	35.134	25.525	24.099	21.764	43.114	14.933	0.00	510
515	25.545	35.134	25.545	24.099	21.834	43.124	14.933	0.00	515
520	25.565	35.134	25.565	24.099	21.904	43.134	14.933	0.00	520
525	25.585	35.134	25.585	24.099	21.974	43.144	14.933	0.00	525
530	25.605	35.134	25.605	24.099	22.044	43.154	14.933	0.00	530
535	25.625	35.134	25.625	24.099	22.114	43.164	14.933	0.00	535
540	25.645	35.134	25.645	24.099	22.184	43.174	14.933	0.00	540
545	25.665	35.134	25.665	24.099	22.254	43.184	14.933	0.00	545
550	25.685	35.134							

# MARATHON 2 STA. 27



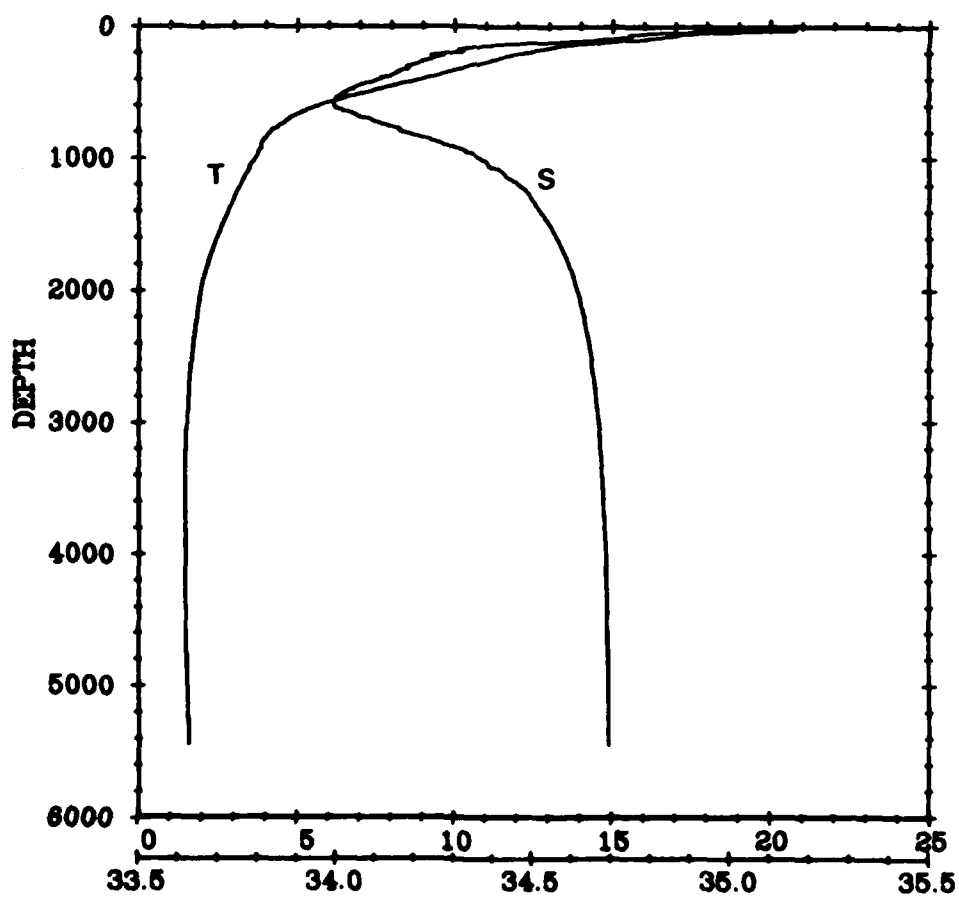
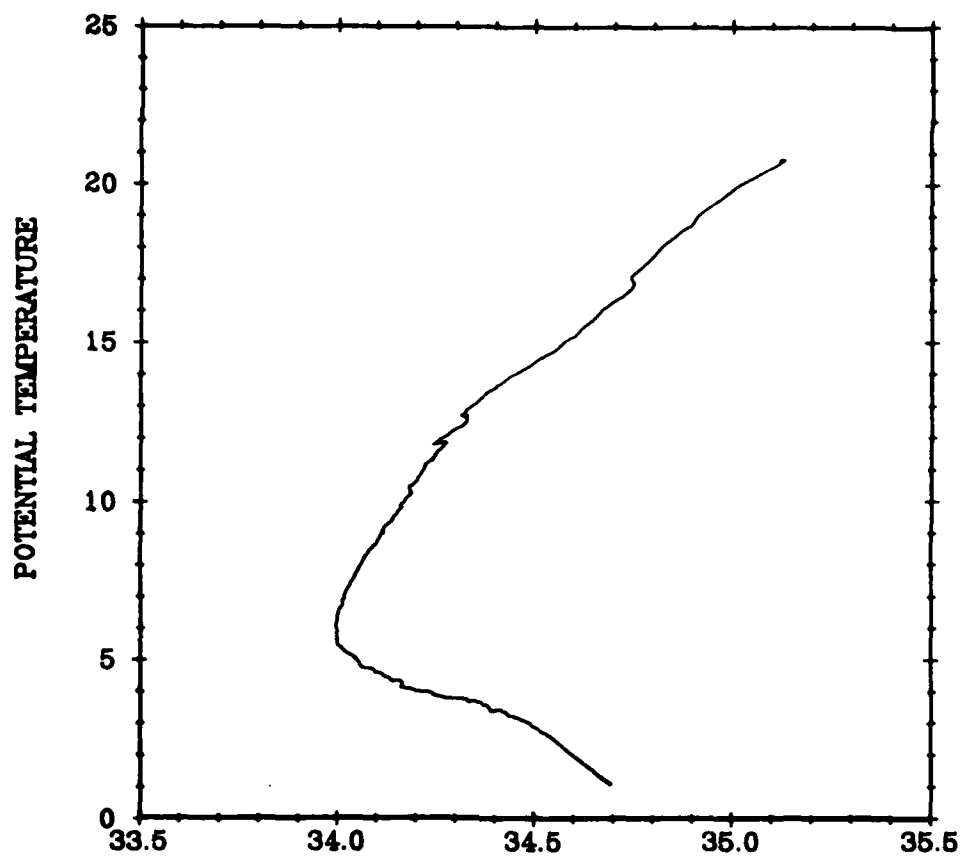
LATITUDE	LONGITUDE	HR	DM	MR	START TIME	ALT	WIND	SPEED	AIR TEMP	SEA STATE	BAROM
12 41.5N	155 05.0E	12	41	54	1204	15	20	15	28.0	1	1012

DEPTH	TEMP	SALINITY	POT TEMP	Sigma	Sigma 2	Sigma 4	Sigma 6	WIND	WIND DIR	WIND SP
DB	CELS		DEG					M		KT
10	28.824	34.124	28.824	24.844	31.124	31.124	31.124	12.0	120	12.0
20	28.793	34.127	28.793	24.842	31.123	31.123	31.123	12.0	120	12.0
30	28.763	34.129	28.763	24.840	31.122	31.122	31.122	12.0	120	12.0
40	28.733	34.131	28.733	24.838	31.121	31.121	31.121	12.0	120	12.0
50	28.703	34.133	28.703	24.836	31.120	31.120	31.120	12.0	120	12.0
60	28.673	34.135	28.673	24.834	31.119	31.119	31.119	12.0	120	12.0
70	28.643	34.137	28.643	24.832	31.118	31.118	31.118	12.0	120	12.0
80	28.613	34.139	28.613	24.830	31.117	31.117	31.117	12.0	120	12.0
90	28.583	34.141	28.583	24.828	31.116	31.116	31.116	12.0	120	12.0
100	28.553	34.143	28.553	24.826	31.115	31.115	31.115	12.0	120	12.0
110	28.523	34.145	28.523	24.824	31.114	31.114	31.114	12.0	120	12.0
120	28.493	34.147	28.493	24.822	31.113	31.113	31.113	12.0	120	12.0
130	28.463	34.149	28.463	24.820	31.112	31.112	31.112	12.0	120	12.0
140	28.433	34.151	28.433	24.818	31.111	31.111	31.111	12.0	120	12.0
150	28.403	34.153	28.403	24.816	31.110	31.110	31.110	12.0	120	12.0
160	28.373	34.155	28.373	24.814	31.109	31.109	31.109	12.0	120	12.0
170	28.343	34.157	28.343	24.812	31.108	31.108	31.108	12.0	120	12.0
180	28.313	34.159	28.313	24.810	31.107	31.107	31.107	12.0	120	12.0
190	28.283	34.161	28.283	24.808	31.106	31.106	31.106	12.0	120	12.0
200	28.253	34.163	28.253	24.806	31.105	31.105	31.105	12.0	120	12.0
210	28.223	34.165	28.223	24.804	31.104	31.104	31.104	12.0	120	12.0
220	28.193	34.167	28.193	24.802	31.103	31.103	31.103	12.0	120	12.0
230	28.163	34.169	28.163	24.800	31.102	31.102	31.102	12.0	120	12.0
240	28.133	34.171	28.133	24.798	31.101	31.101	31.101	12.0	120	12.0
250	28.103	34.173	28.103	24.796	31.100	31.100	31.100	12.0	120	12.0
260	28.073	34.175	28.073	24.794	31.099	31.099	31.099	12.0	120	12.0
270	28.043	34.177	28.043	24.792	31.098	31.098	31.098	12.0	120	12.0
280	28.013	34.179	28.013	24.790	31.097	31.097	31.097	12.0	120	12.0
290	27.983	34.181	27.983	24.788	31.096	31.096	31.096	12.0	120	12.0
300	27.953	34.183	27.953	24.786	31.095	31.095	31.095	12.0	120	12.0
310	27.923	34.185	27.923	24.784	31.094	31.094	31.094	12.0	120	12.0
320	27.893	34.187	27.893	24.782	31.093	31.093	31.093	12.0	120	12.0
330	27.863	34.189	27.863	24.780	31.092	31.092	31.092	12.0	120	12.0
340	27.833	34.191	27.833	24.778	31.091	31.091	31.091	12.0	120	12.0

WIDEN BUTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 02	02 SAT	SIG1	P04	N01	N02	TRIC	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PRACT	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	20.959	34.961	5.43	102.4	2.4	1.02	0.0	0.00	45.959	24.621	31.344	41.174		1
3	19.976	34.924	5.75	104.6	3.2	1.07	0.0	0.00	18.547	25.178	31.373	41.702		3
5	18.249	34.871	5.79	107.3	3.9	1.13	0.2	0.05	13.367	25.459	34.449	42.257	113	
7	17.769	34.810	5.11	95.3	9.1	1.16	1.1	1.1	13.148	25.916	34.521	42.929	153	
9	12.272	34.299	5.19	99.4	9.9	1.16	3.6	1.11	12.245	25.934	34.724	43.171	204	
11	8.555	34.259	5.16	92.4	16.2	1.17	13.1	1.1	10.619	26.223	35.318	43.429	305	
13	8.657	34.043	4.60	107.4	29.4	1.19	20.1	0.10	9.624	26.457	33.151	43.841	405	
15	6.426	34.012	1.59	72.1	44.1	1.32	4.7	1.18	6.978	26.657	33.621	44.191	506	
17	4.480	34.001	2.31	32.1	59.2	2.49	15.4	1.1	5.629	26.913	33.957	44.551	604	
19	4.114	34.000	1.16	14.3	99.9	2.94	41.2	1.1	4.579	26.449	35.369	44.911	701	
21	4.106	34.192	2.56	1.1	107.9	3.11	43.9	0.10	4.076	27.135	36.205	44.917	976	
23	3.862	34.259	1.10	3.1	107.9	3.11	44.9	0.10	3.735	27.241	36.311	45.947	977	
25	3.664	34.349	0.25	1.4	124.9	3.23	45.2	0.10	3.541	27.310	36.432	45.949	1009	
27	3.131	34.411	1.50	6.1	119.1	3.21	45.1	0.1	3.14	27.454	36.612	45.951	1249	
29	2.701	34.541	1.91	11.1	101.1	3.13	44.2	0.10	2.594	27.755	36.721	45.949	1572	
31	2.459	34.581	1.29	16.9	144.4	3.14	43.2	0.10	2.14	27.826	36.421	45.626	1700	
33	2.111	34.611	1.69	17.1	119.1	3.17	42.4	0.10	1.974	27.659	36.319	45.679	2106	
35	1.664	34.641	2.22	29.6	4.4	2.94	43.1	0.10	1.511	27.226	36.459	45.626	2506	
37	1.461	34.661	2.77	15.6	107.2	2.94	43.1	0.1	1.464	27.144	36.349	45.526	2819	
39	1.264	34.679	3.16	4.4	154.2	2.97	39.1	0.1	1.146	27.174	37.121	45.871	3119	
41	1.462	34.699	1.19	49.1	119.9	2.97	37.7	0.10	1.140	27.391	37.149	45.871	3419	
43	1.489	34.698			156.2		37.1	0.1	1.179	27.371	37.149	45.871	3719	
45	1.537	34.691	3.60	46.1	151.2	2.49	36.7	0.10	1.095	27.191	37.143	45.892	4041	
47	1.590	34.691			151.4	2.12	16.6	0.10	1.094	27.191	37.245	45.891	5544	



MARATHON 2 STA. 28



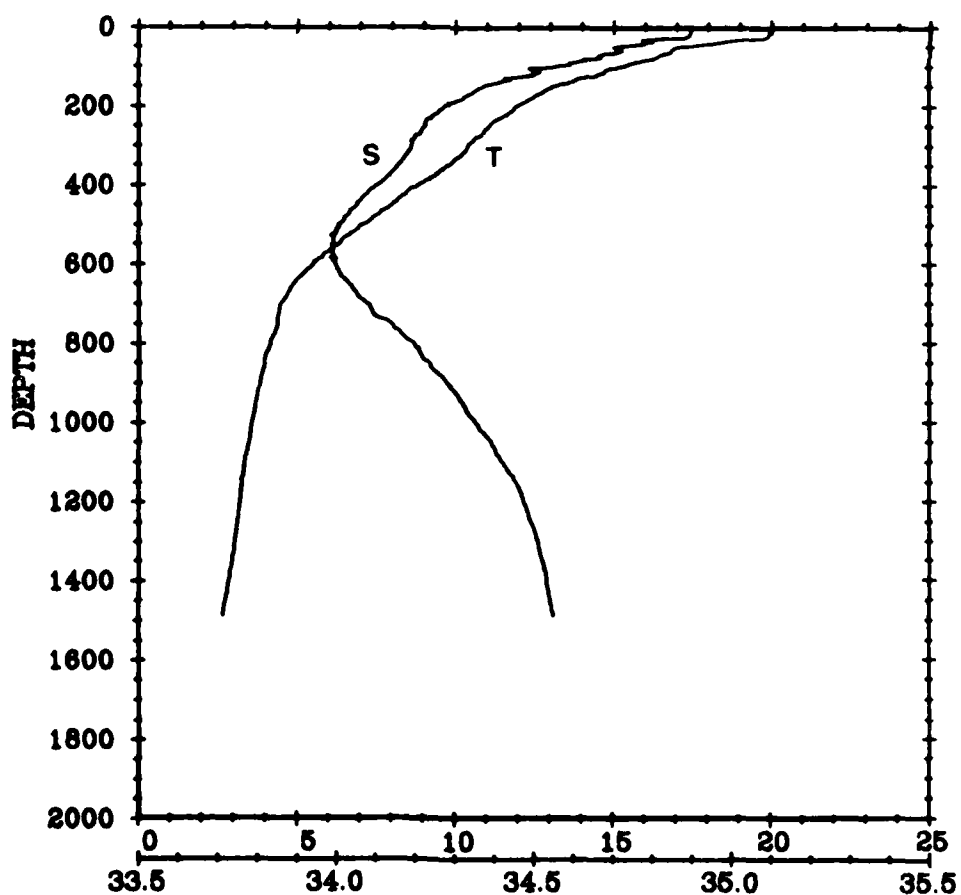
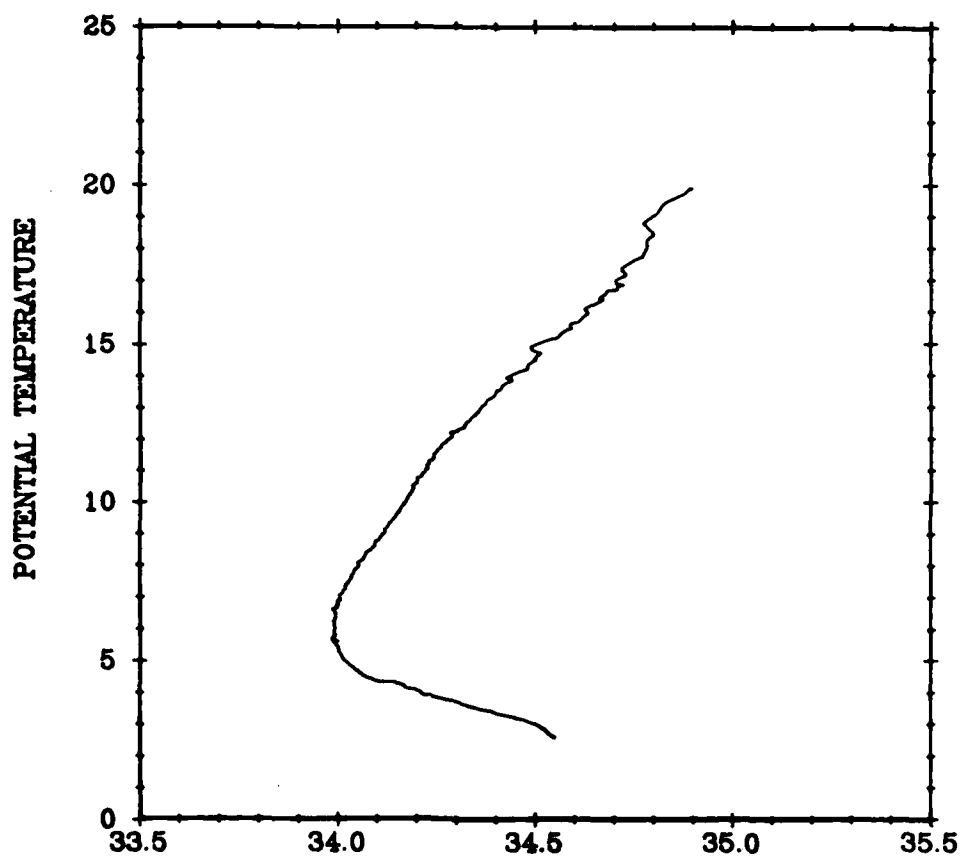
SMITH WAS WASHINGTON MARATHON LEG 11 STATION 14

LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BTDM	WIND	SPEED	AIR TEMP	WFT BULB	BAROM
11 34 N	152 10 W	1974 34	0724	421	100	10	19.4	15.7	1019.4

STD DATA	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C						
0	19.929	34.894	19.929	24.701	13.154	41.244	14.126	0.0	0
10	19.925	34.891	19.925	24.724	13.182	41.270	14.154	0.1	10
20	19.921	34.887	19.921	24.747	13.210	41.296	14.182	0.2	20
30	19.917	34.884	19.917	24.770	13.238	41.322	14.210	0.3	30
40	19.913	34.880	19.913	24.793	13.266	41.348	14.238	0.4	40
50	19.909	34.877	19.909	24.816	13.294	41.374	14.266	0.5	50
60	19.905	34.873	19.905	24.839	13.322	41.400	14.294	0.6	60
70	19.901	34.870	19.901	24.862	13.350	41.426	14.322	0.7	70
80	19.897	34.866	19.897	24.885	13.378	41.452	14.350	0.8	80
90	19.893	34.863	19.893	24.908	13.406	41.478	14.378	0.9	90
100	19.889	34.859	19.889	24.931	13.434	41.504	14.406	1.0	100
110	19.885	34.856	19.885	24.954	13.462	41.530	14.434	1.1	110
120	19.881	34.852	19.881	24.977	13.490	41.556	14.462	1.2	120
130	19.877	34.849	19.877	24.999	13.518	41.582	14.490	1.3	130
140	19.873	34.845	19.873	25.022	13.546	41.608	14.518	1.4	140
150	19.869	34.842	19.869	25.045	13.574	41.634	14.546	1.5	150
160	19.865	34.838	19.865	25.068	13.602	41.660	14.574	1.6	160
170	19.861	34.835	19.861	25.091	13.630	41.686	14.602	1.7	170
180	19.857	34.831	19.857	25.114	13.658	41.712	14.630	1.8	180
190	19.853	34.828	19.853	25.137	13.686	41.738	14.658	1.9	190
200	19.849	34.824	19.849	25.160	13.714	41.764	14.686	2.0	200
210	19.845	34.821	19.845	25.183	13.742	41.790	14.714	2.1	210
220	19.841	34.817	19.841	25.206	13.770	41.816	14.742	2.2	220
230	19.837	34.814	19.837	25.229	13.798	41.842	14.770	2.3	230
240	19.833	34.810	19.833	25.252	13.826	41.868	14.798	2.4	240
250	19.829	34.807	19.829	25.275	13.854	41.894	14.826	2.5	250
260	19.825	34.803	19.825	25.298	13.882	41.920	14.854	2.6	260
270	19.821	34.800	19.821	25.321	13.910	41.946	14.882	2.7	270
280	19.817	34.796	19.817	25.344	13.938	41.972	14.910	2.8	280
290	19.813	34.793	19.813	25.367	13.966	41.998	14.938	2.9	290
300	19.809	34.789	19.809	25.390	13.994	42.024	14.966	3.0	300
310	19.805	34.786	19.805	25.413	14.022	42.050	14.994	3.1	310
320	19.801	34.782	19.801	25.436	14.050	42.076	15.022	3.2	320
330	19.797	34.779	19.797	25.459	14.078	42.102	15.050	3.3	330
340	19.793	34.775	19.793	25.482	14.106	42.128	15.078	3.4	340
350	19.789	34.772	19.789	25.505	14.134	42.154	15.106	3.5	350
360	19.785	34.768	19.785	25.528	14.162	42.180	15.134	3.6	360
370	19.781	34.765	19.781	25.551	14.190	42.206	15.162	3.7	370
380	19.777	34.761	19.777	25.574	14.218	42.232	15.190	3.8	380
390	19.773	34.758	19.773	25.597	14.246	42.258	15.218	3.9	390
400	19.769	34.754	19.769	25.620	14.274	42.284	15.246	4.0	400
410	19.765	34.751	19.765	25.643	14.302	42.310	15.274	4.1	410
420	19.761	34.747	19.761	25.666	14.330	42.336	15.302	4.2	420
430	19.757	34.744	19.757	25.689	14.358	42.362	15.330	4.3	430
440	19.753	34.740	19.753	25.712	14.386	42.388	15.358	4.4	440
450	19.749	34.737	19.749	25.735	14.414	42.414	15.386	4.5	450
460	19.745	34.733	19.745	25.758	14.442	42.440	15.414	4.6	460
470	19.741	34.730	19.741	25.781	14.470	42.466	15.442	4.7	470
480	19.737	34.726	19.737	25.804	14.498	42.492	15.470	4.8	480
490	19.733	34.723	19.733	25.827	14.526	42.518	15.498	4.9	490
500	19.729	34.719	19.729	25.850	14.554	42.544	15.526	5.0	500
510	19.725	34.716	19.725	25.873	14.582	42.570	15.554	5.1	510
520	19.721	34.712	19.721	25.896	14.610	42.596	15.582	5.2	520
530	19.717	34.709	19.717	25.919	14.638	42.622	15.610	5.3	530
540	19.713	34.705	19.713	25.942	14.666	42.648	15.638	5.4	540
550	19.709	34.702	19.709	25.965	14.694	42.674	15.666	5.5	550
560	19.705	34.698	19.705	25.988	14.722	42.700	15.694	5.6	560
570	19.701	34.695	19.701	26.011	14.750	42.726	15.722	5.7	570
580	19.697	34.691	19.697	26.034	14.778	42.752	15.750	5.8	580
590	19.693	34.688	19.693	26.057	14.806	42.778	15.778	5.9	590
600	19.689	34.684	19.689	26.080	14.834	42.804	15.806	6.0	600
610	19.685	34.681	19.685	26.103	14.862	42.830	15.834	6.1	610
620	19.681	34.677	19.681	26.126	14.890	42.856	15.862	6.2	620
630	19.677	34.674	19.677	26.149	14.918	42.882	15.890	6.3	630
640	19.673	34.670	19.673	26.172	14.946	42.908	15.918	6.4	640
650	19.669	34.667	19.669	26.195	14.974	42.934	15.946	6.5	650
660	19.665	34.663	19.665	26.218	15.002	42.960	15.974	6.6	660
670	19.661	34.660	19.661	26.241	15.030	42.986	16.002	6.7	670
680	19.657	34.656	19.657	26.264	15.058	43.012	16.030	6.8	680
690	19.653	34.653	19.653	26.287	15.086	43.038	16.058	6.9	690
700	19.649	34.649	19.649	26.310	15.114	43.064	16.086	7.0	700
710	19.645	34.646	19.645	26.333	15.142	43.090	16.114	7.1	710
720	19.641	34.642	19.641	26.356	15.170	43.116	16.142	7.2	720
730	19.637	34.639	19.637	26.379	15.198	43.142	16.170	7.3	730
740	19.633	34.635	19.633	26.402	15.226	43.168	16.198	7.4	740
750	19.629	34.632	19.629	26.425	15.254	43.194	16.226	7.5	750
760	19.625	34.628	19.625	26.448	15.282	43.220	16.254	7.6	760
770	19.621	34.625	19.621	26.471	15.310	43.246	16.282	7.7	770
780	19.617	34.621	19.617	26.494	15.338	43.272	16.310	7.8	780
790	19.613	34.618	19.613	26.517	15.366	43.298	16.338	7.9	790
800	19.609	34.614	19.609	26.540	15.394	43.324	16.366	8.0	800
810	19.605	34.611	19.605	26.563	15.422	43.350	16.394	8.1	810
820	19.601	34.607	19.601	26.586	15.450	43.376	16.422	8.2	820
830	19.597	34.604	19.597	26.609	15.478	43.402	16.450	8.3	830
840	19.593	34.600	19.593	26.632	15.506	43.428	16.478	8.4	840
850	19.589	34.597	19.589	26.655	15.534	43.454	16.506	8.5	850
860	19.585	34.593	19.585	26.678	15.562	43.480	16.534	8.6	860
870	19.581	34.590	19.581	26.701	15.590	43.506	16.562	8.7	870
880	19.577	34.586	19.577	26.724	15.618	43.532	16.590	8.8	880
890	19.573	34.583	19.573	26.747	15.646	43.558	16.618	8.9	890
900	19.569	34.579	19.569	26.770	15.674	43.584	16.646	9.0	900
910	19.565	34.576	19.565	26.793	15.702	43.610	16.674	9.1	910
920	19.561	34.572	19.561	26.816	15.730	43.636	16.702	9.2	920
930	19.557	34.569	19.557	26.839	15.758	43.662	16.730	9.3	930
940	19.553	34.565	19.553	26.862	15.786	43.688	16.758	9.4	940
950	19.549	34.562	19.549	26.885	15.814	43.714	16.786	9.5	950
960	19.545	34.558	19.545	26.908	15.842	43.740	16.814	9.6	960
970	19.541	34.555	19.541	26.931	15.870	43.766	16.842	9.7	970
980	19.537	34.551	19.537	26.954	15.898	43.792	16.870	9.8	980
990	19.533	34.548	19.533	26.977	15.926	43.818	16.898	9.9	990
1000	19.529	34.544	19.529	27.000	15.954	43.844	16.926	10.0	1000

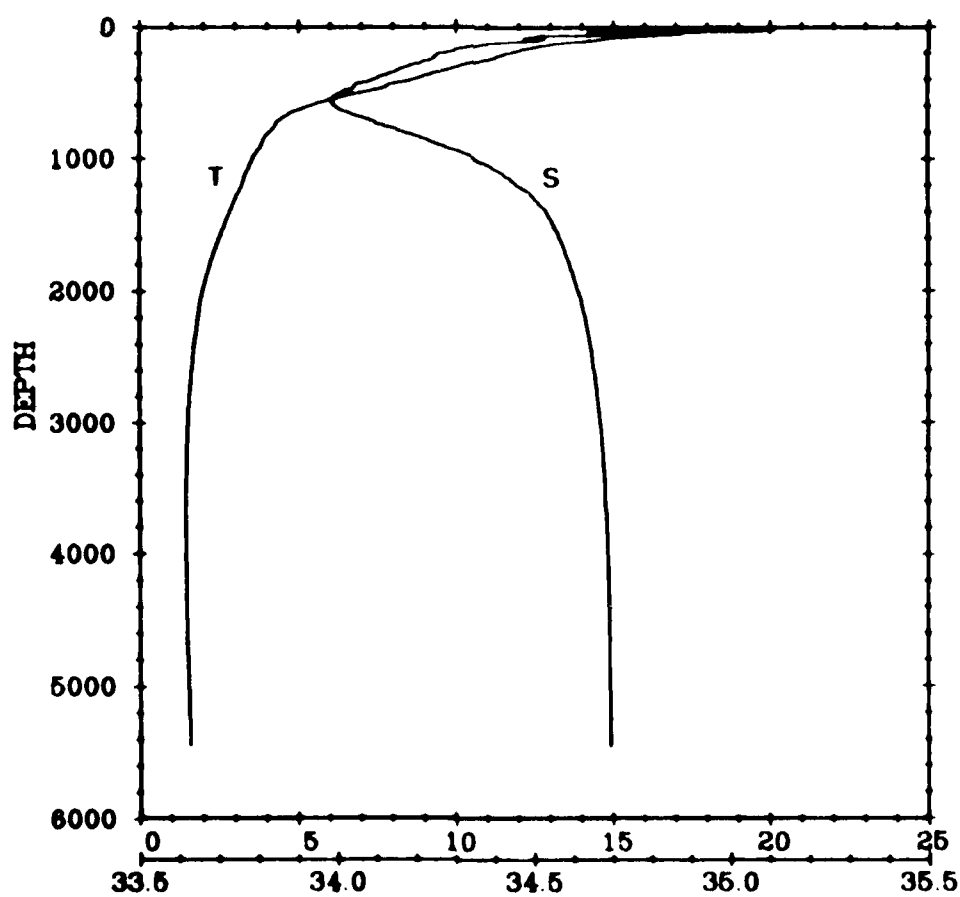
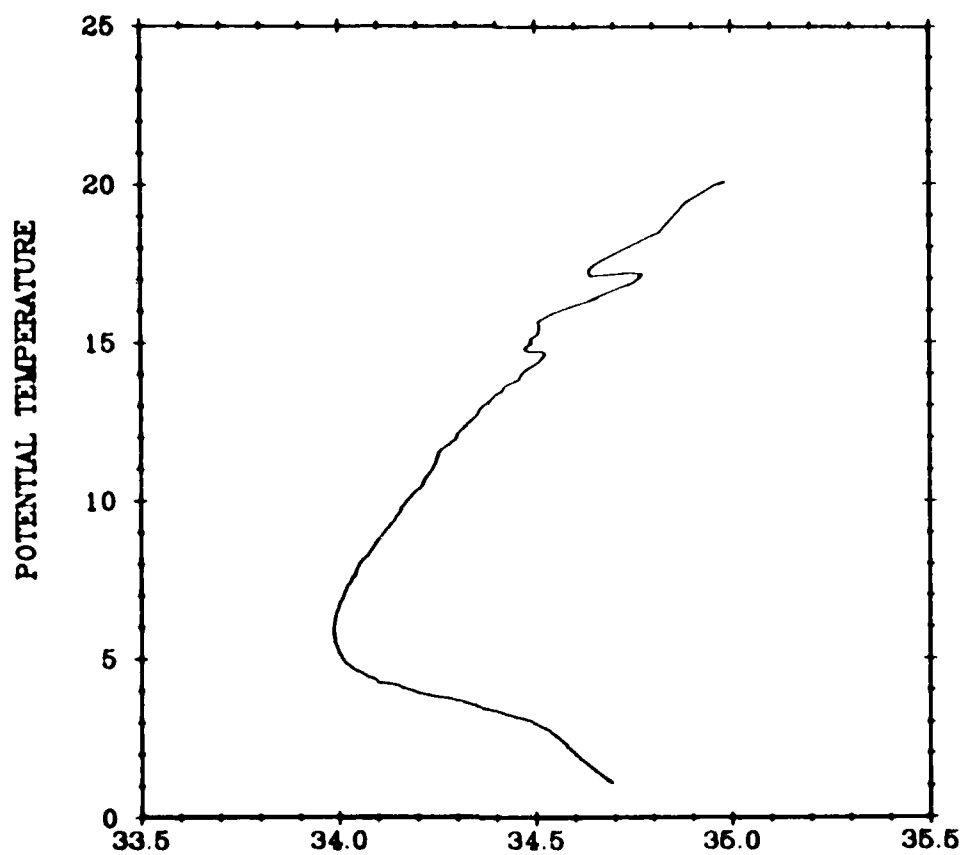
NISKIN BOTTLE DATA			DIS C2		O2 SAT		SIG3		P04		NO3		NO2		TRIT		POT TEMP		SIGMA T		SIGMA 2		SIGMA 4		PRESL	
DEPTH	TEMP	SALINITY	ML L	ML L	%	UM L	UM L	UM L	UM L	UM L	UM L	UM L	UM L	UM L	UM L	DEG C	DEG C									
4	19.934	34.894	5.33	103.0	4.1	0.07	0.0	0.00	0.0	0.00	0.0	0.00	0.0	0.00	0.0	19.933	24.700	13.153	41.242	14.125	0.0	0.0	0.0	0.0	0.0	
51	19.917	34.895	5.72	104.4	4.9	0.10	0.1	0.10	0.1	0.10	0.1	0.10	0.1	0.10	0.1	19.918	25.289	13.941	42.421	15.154	0.1	0.1	0.1	0.1	0.1	
111	19.900	34.890	5.56	91.8	5.0	0.27	1.9	0.14	1.9	0.14	1.9	0.14	1.9	0.14	1.9	19.901	25.142	14.219	42.444	14.219	0.2	0.2	0.2	0.2	0.2	
115	19.915	34.444	5.25	89.8	8.0	0.49</																				

# MARATHON 2 STA. 29



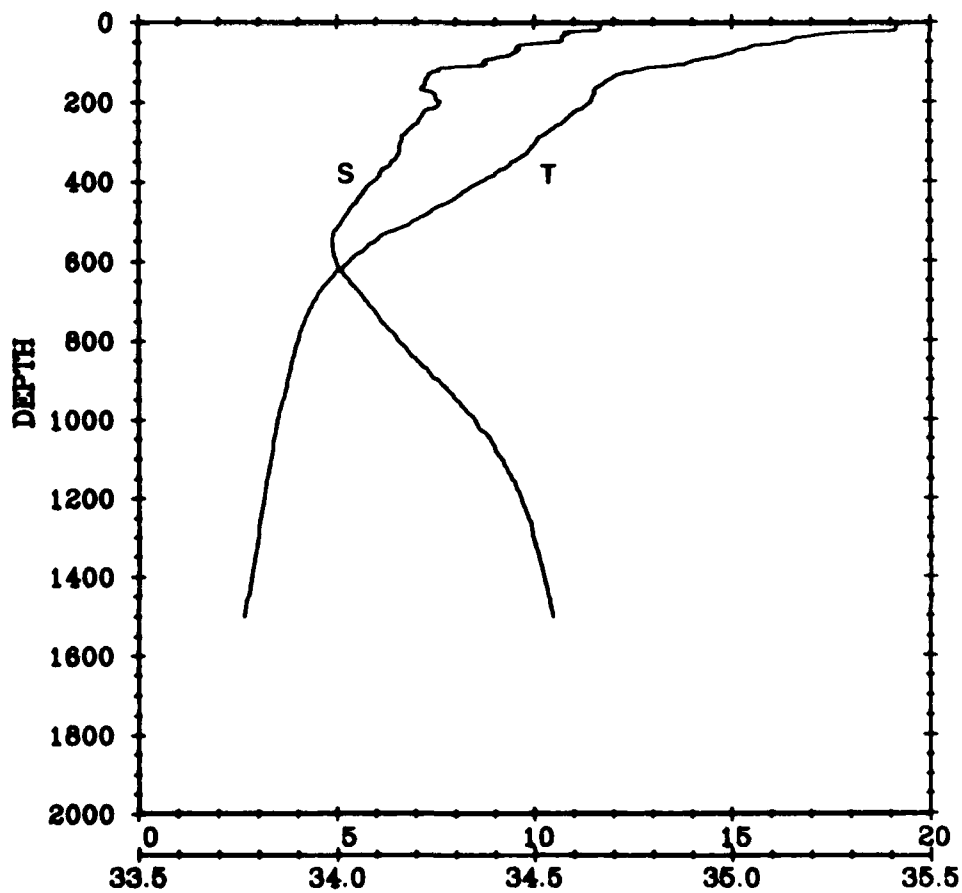
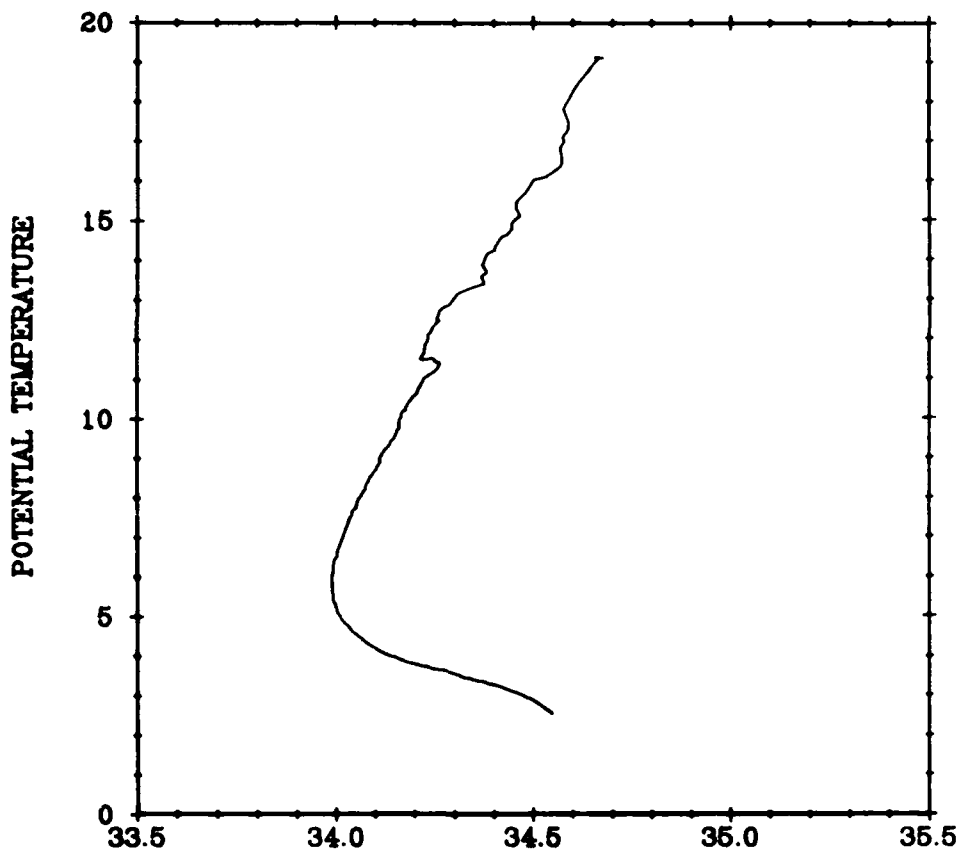
[illegible]

# MARATHON 2 STA. 30



[illegible]

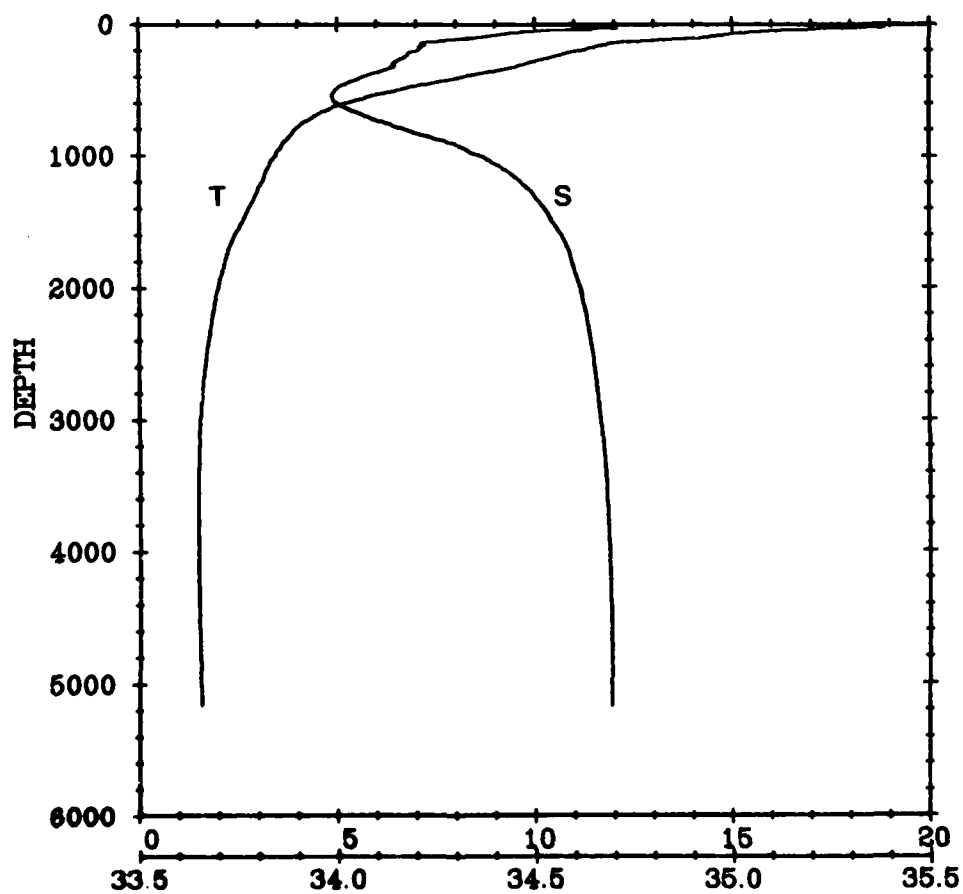
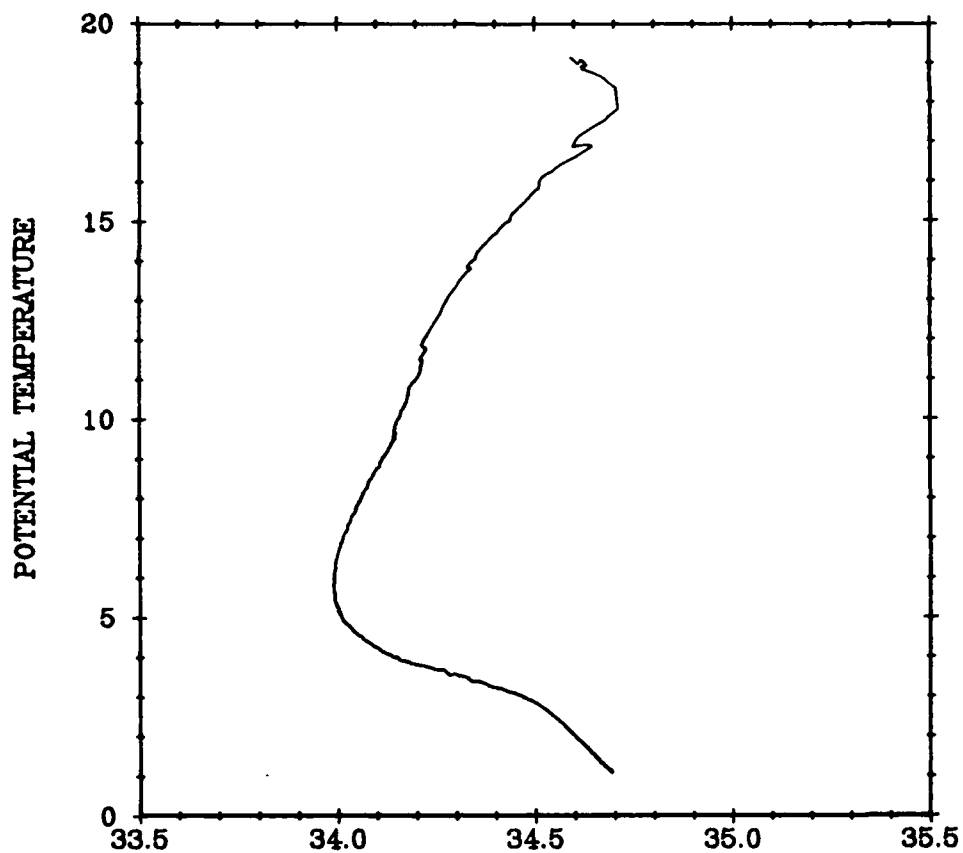
# MARATHON 2 STA. 31



WICKEN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS. 22	22 SAT	SIGMA-T	P-4	N-1	N-2	TRIT	P-UT	TEMP	SIGMA-2	SIGMA-4	PRESS
M	DEG C	PPT	ML/L	%	KG/L	UM/L	UM/L	UM/L	UM/L	TRITIN	DEG C			DB
1	17.215	34.919	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.724	31.007	40.725	1.0
5	16.119	34.950	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.705	31.005	42.241	1.5
10	15.112	34.970	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.686	31.003	43.757	2.0
15	14.107	34.989	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.667	31.001	45.273	2.5
20	13.102	34.995	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.648	31.000	46.789	3.0
25	12.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.629	31.000	48.305	3.5
30	11.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.610	31.000	49.821	4.0
35	10.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.591	31.000	51.337	4.5
40	9.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.572	31.000	52.853	5.0
45	8.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.553	31.000	54.369	5.5
50	7.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.534	31.000	55.885	6.0
55	6.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.515	31.000	57.401	6.5
60	5.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.496	31.000	58.917	7.0
65	4.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.477	31.000	60.433	7.5
70	3.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.458	31.000	61.949	8.0
75	2.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.439	31.000	63.465	8.5
80	1.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.420	31.000	64.981	9.0
85	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.401	31.000	66.497	9.5
90	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.382	31.000	68.013	10.0
95	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.363	31.000	69.529	10.5
100	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.344	31.000	71.045	11.0
105	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.325	31.000	72.561	11.5
110	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.306	31.000	74.077	12.0
115	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.287	31.000	75.593	12.5
120	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.268	31.000	77.109	13.0
125	0.100	34.999	1.014	101.4	1.014	1.9	0.12	0.1	0.0	19.13	24.249			



# MARATHON 2 STA. 32

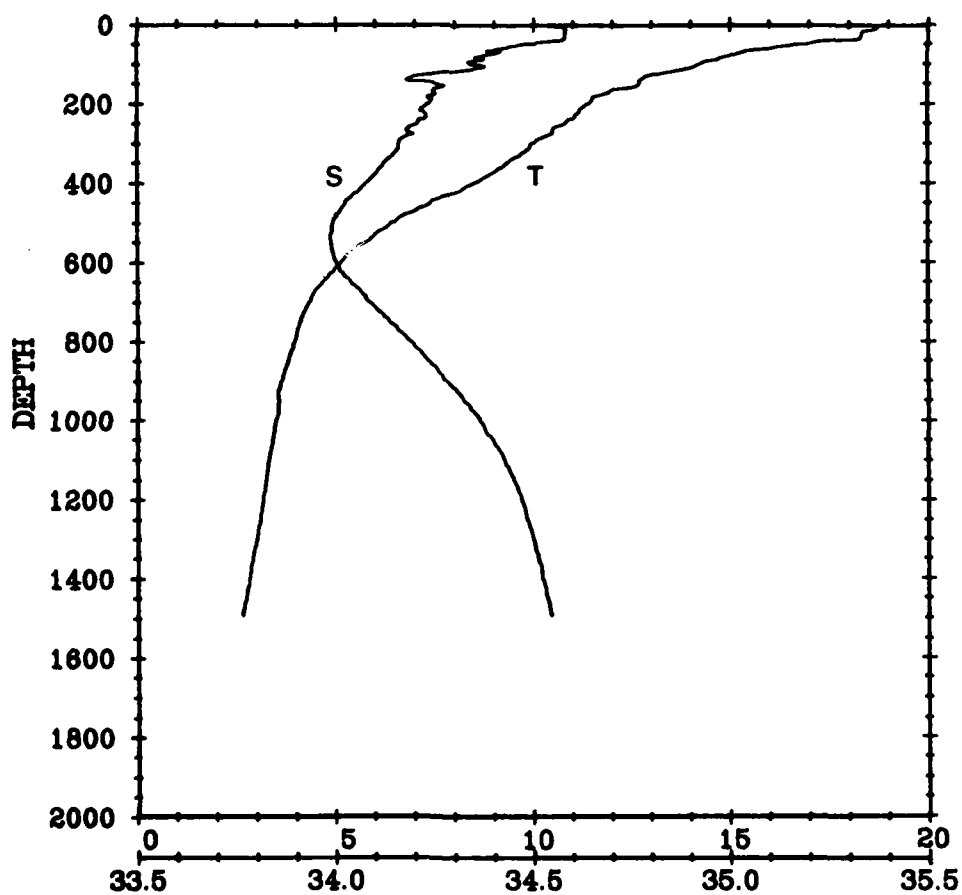
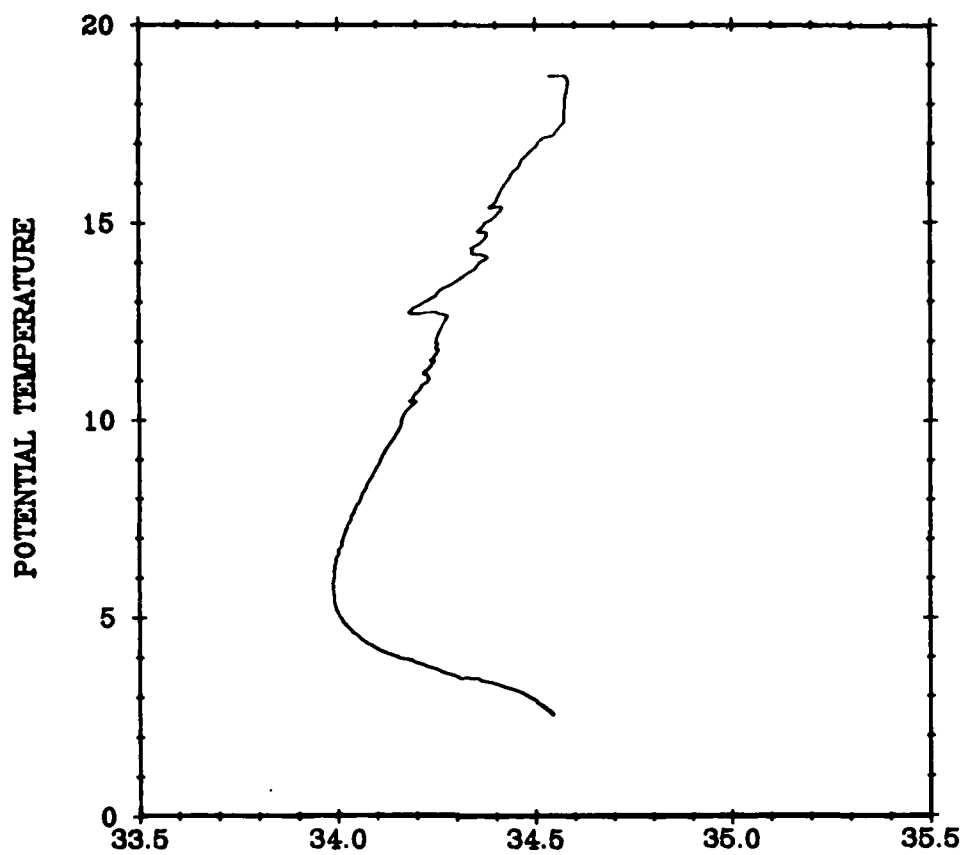


LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	NET WUL3	BAROM
					MET	M	DIR	KT	DEG F	DEG F	IN
12 34.2N	152 05W	1	11	94	111	1124	112	2	19.4	19.2	1020.7

CTD DATA										DYNAMIC HT	DEPTH
PRESS	TEMP	SALINITY	POT. TEMP	SIGMA T	SIGMA T	SIGMA T	SIGMA T	SIGMA T	TEMP		
DB	DEG C		DEG						DEG C	M	
1	34.599	34.586	14.596	24.747	33.276	41.394	41.723	41.700	17.0	0	
2	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	1	
3	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	2	
4	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	3	
5	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	4	
6	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	5	
7	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	6	
8	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	7	
9	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	8	
10	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	9	
11	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	10	
12	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	11	
13	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	12	
14	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	13	
15	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	14	
16	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	15	
17	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	16	
18	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	17	
19	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	18	
20	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	19	
21	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	20	
22	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	21	
23	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	22	
24	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	23	
25	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	24	
26	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	25	
27	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	26	
28	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	27	
29	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	28	
30	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	29	
31	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	30	
32	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	31	
33	34.599	34.587	14.596	24.747	33.276	41.394	41.723	41.700	17.0	32	
34	34.599	34.587	14.596	24.747	33.276</						

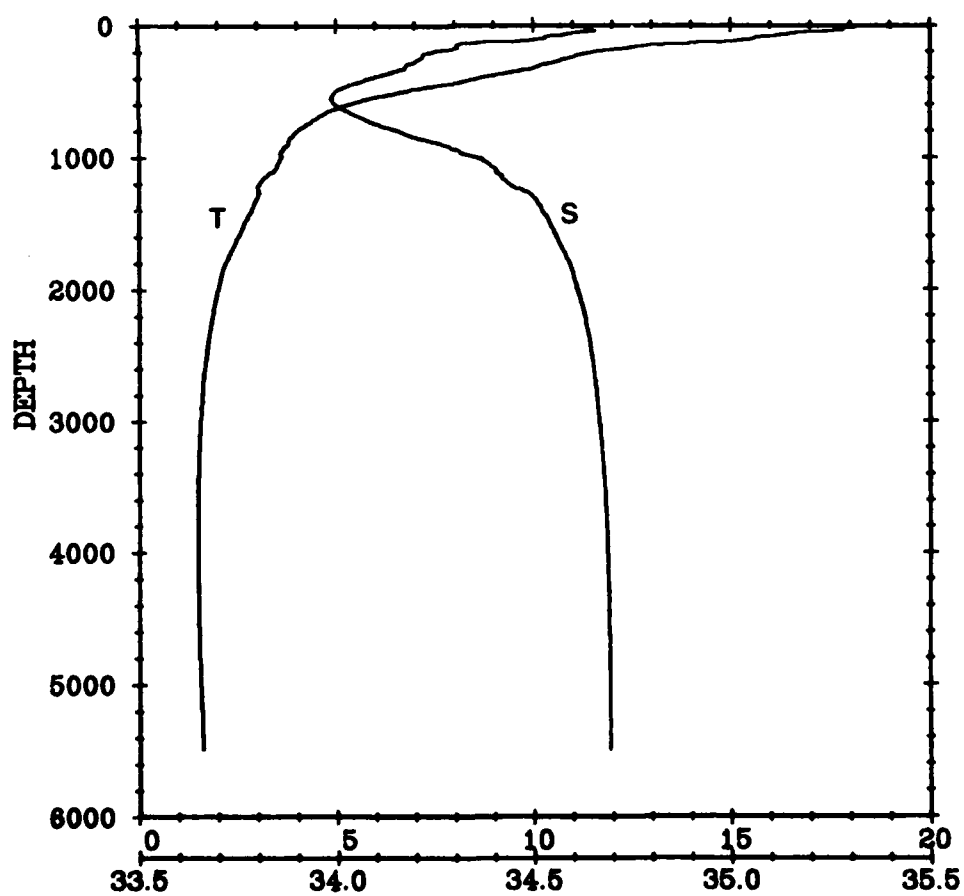
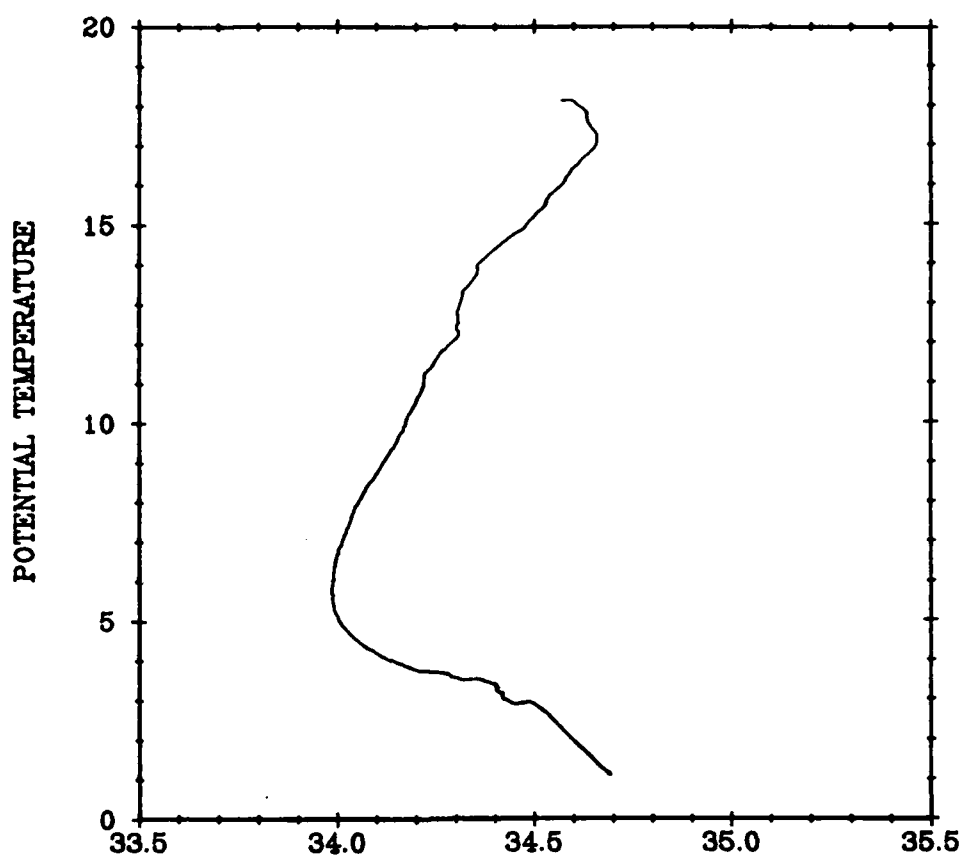
WILKIN BOTTLE DATA															
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	P04	NO3	NO2	TRIT	POT	TEMP	SIGMA T	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PROM	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C					DB
10	18.594	34.580	5.51	101.6	5.0	0.12	0.0	0.00		18.54	24.826	13.377	41.415		
12	18.950	34.420	5.99	106.7	5.4	0.16	0.0	0.00		18.342	25.330	13.244	42.141		
132	14.219	34.364	6.71	98.8	6.1	0.32	2.1	0.09		14.224	25.651	14.163	40.774		1.0
134	12.916	34.134	5.75	96.1	6.9	0.45	4.5	0.00		12.789	25.911	14.220	42.344		1.0
197	11.196	34.244	5.47	96.9	6.0	0.59	8.9	0.01		11.764	26.039	14.501	43.119		1.0
201	11.136	34.216	5.53	99.4	12.6	0.77	13.4	0.01		11.771	25.927	14.477	43.276		1.0
203	10.588	34.128	5.41	96.2	5.0	0.89	12.3	0.01		11.358	26.222	15.221	43.414		1.0
299	9.891	34.118	5.19	79.9	20.0	1.10	15.6	0.01		9.866	26.119	15.149	43.594		1.0
422	8.422	34.773	4.65	71.6	10.5	1.45	20.6	0.01		8.185	26.438	15.182	43.898		1.0
497	6.512	33.947	3.42	49.6	52.9	2.06	28.8	0.00		4.447	26.700	16.494	44.211		1.0
592	5.214	34.110	2.15	32.4	5.0	2.54	35.7	0.00		5.186	26.861	16.407	44.752		1.0
692	4.434	34.072	1.10	19.0	94.8	2.98	40.9	0.00		4.361	27.008	16.194	44.717		1.0
800	3.983	34.181	0.60	8.2	113.0	3.10	43.6	0.00		3.924	27.143	16.260	44.952		1.0
901	3.642	34.272	0.32	4.3	125.8	3.17	44.7	0.00		3.677	27.250	16.374	45.192		1.0
999	3.473	34.361	0.20	2.7	134.1		45.3	0.01		3.401	27.337	16.469	45.191		1.0
1247	3.292	34.483	0.50	6.7	144.9	3.17	45.0	0.00		3.003	27.472	16.623	45.366		1.0
1493	2.647	34.545	0.91	12.0	156.8	3.11	44.2	0.00		2.343	27.562	16.717	45.502		1.0

# MARATHON 2 STA. 33





# MARATHON 2 STA. 34



LATITUDE 34 42 N LONGITUDE 122 55 W MO. DY. YR. 10 10 84 START TIME 1454 BOTTLE NO. 45 WIND 140 SPEED 15 AIR TEMP 58.0 SURF WIND DIR 190 SURF WIND S 120

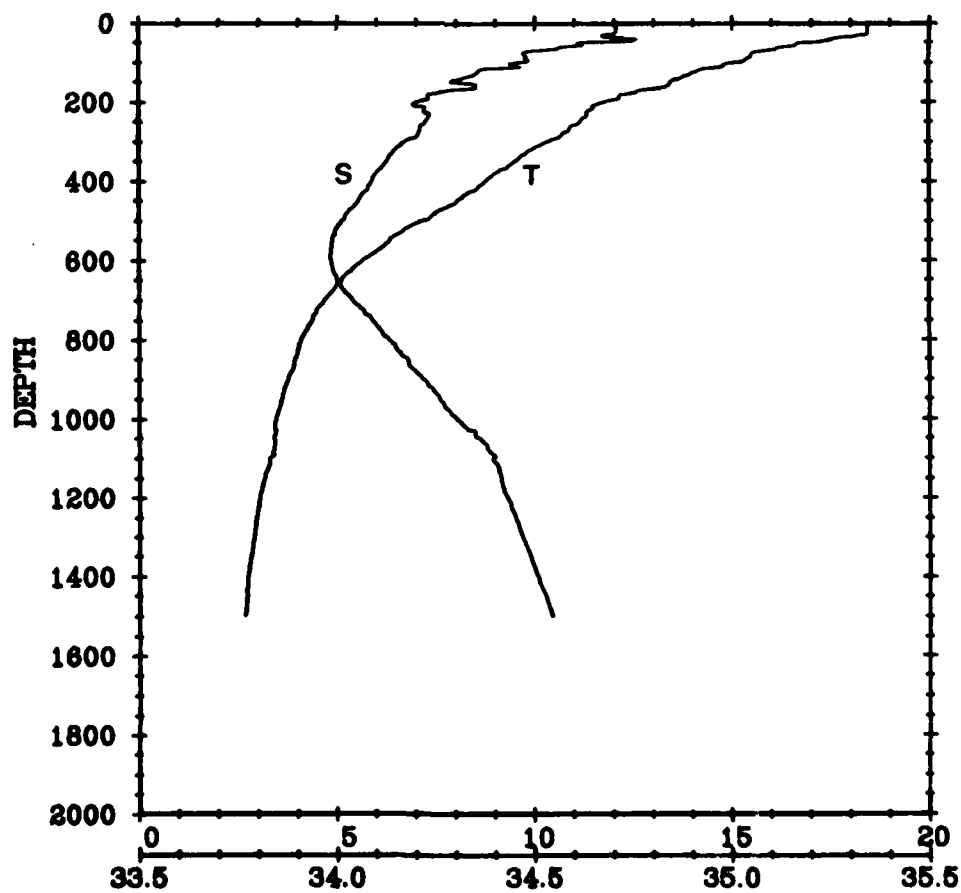
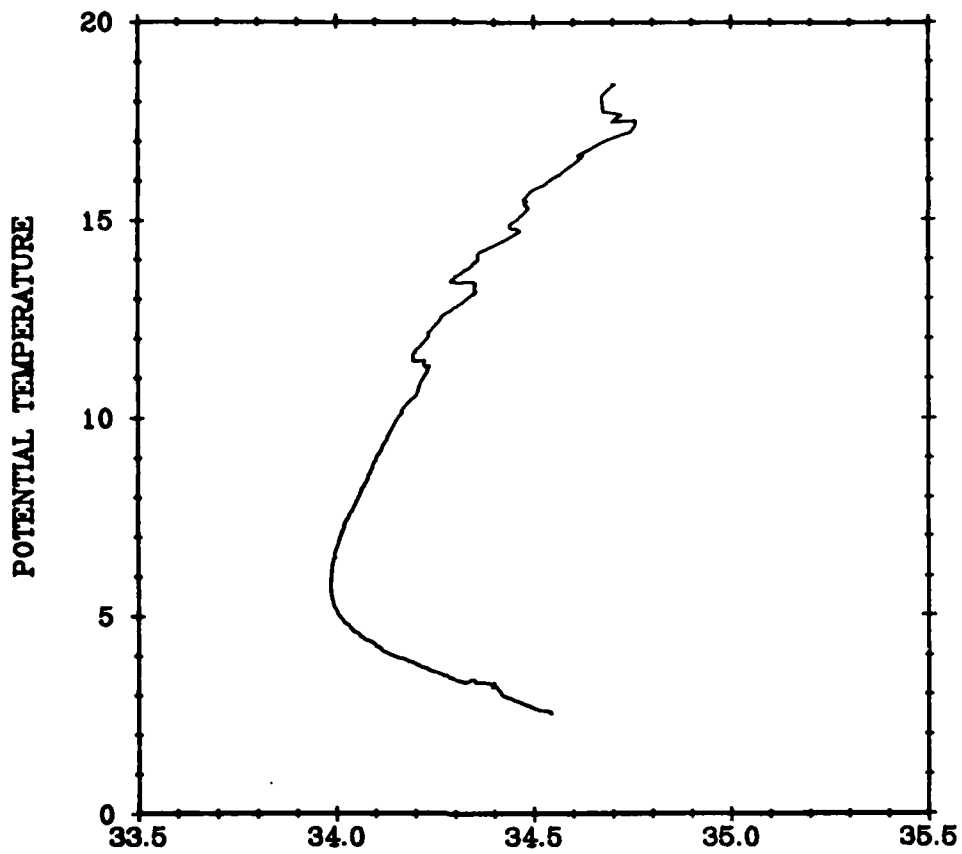
TO DATA

DEPTH	TEMP	SALINITY	POT TEMP	SIGMA	SIGMA 2	SIGMA 4	WVA	DYNAMIC HT	DEPTH
M	DEG C		DEG C				CM		M
0	18.427	34.702	18.427	24.939	33.442	41.549	100.54		0
1	18.439	34.702	18.439	24.944	33.473	41.541	100.101		1
2	17.549	34.702	17.561	25.132	33.483	41.545	281.647		2
3	16.337	34.687	16.343	25.332	33.426	41.529	243.252		3
4	15.359	34.485	15.347	25.451	33.359	41.509	254.024		4
5	15.156	34.452	15.151	25.547	33.349	41.514	245.848		5
10	13.473	34.324	13.452	25.774	33.456	42.159	220.407		10
20	11.917	34.212	11.791	26.119	34.167	43.113	202.457		20
30	10.141	34.225	11.112	26.153	34.328	43.314	191.198		30
40	10.377	34.180	10.335	26.255	35.163	43.485	182.104		40
50	9.511	34.127	9.474	26.358	35.214	43.561	173.101		50
60	8.756	34.189	8.732	26.447	35.125	43.513	165.124		60
70	8.059	34.175	8.113	26.511	35.442	43.741	157.472		70
80	7.254	34.117	7.278	26.656	35.545	44.119	149.784		80
90	6.514	34.085	6.563	26.792	35.815	44.334	132.211		90
100	5.747	34.114	4.565	26.911	36.122	44.591	115.44		100
110	4.919	34.128	4.549	27.088	36.190	44.887	101.798		110
120	3.769	34.214	3.704	27.191	36.110	45.122	94.611		120
130	3.450	34.297	3.389	27.288	36.422	45.148	85.561		130
140	3.147	34.194	3.264	27.377	36.315	45.245	77.742		140
150	3.128	34.427	2.954	27.432	36.585	45.113	72.473		150
160	2.991	34.466	2.901	27.477	36.639	45.333	68.714		160
170	2.741	34.511	2.649	27.522	36.690	45.491	64.631		170
180	2.662	34.540	2.553	27.557	36.731	45.435	61.619		180
190	2.457	34.544	2.532	27.563	36.738	45.504	61.058		190

WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS 02	02 SAT	SIO3	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUPIN	DEG C				DB
0	18.539	34.752	5.49	103.2	3.7	0.10	0.1	0.10	18.539	24.937	33.414	41.544		0
1	16.913	34.701	5.71	104.1	3.7	0.10	0.1	0.10	16.923	25.103	33.856	42.138		51
2	14.924	34.447	5.72	100.1	4.5	0.22	0.8	0.46	14.939	25.366	34.192	42.444		111
3	13.630	34.326	5.59	95.3	5.9	0.39	4.0	0.31	13.651	25.737	34.411	42.757		174
4	12.922	34.321	5.40	90.6	8.5	0.56	7.0	0.12	12.999	25.887	34.390	42.913		237
5	11.917	34.323	5.52	90.5	9.8	0.67	8.7	0.11	11.947	26.015	34.750	43.114		291
10	10.141	34.226	5.50	88.7	13.0	0.79	10.9	0.01	10.194	26.156	34.932	43.324		350
20	8.431	34.189	5.34	84.9	16.2	0.92	11.1	0.01	8.443	26.242	35.046	43.453		410
30	8.056	34.191	4.50	77.4	27.8	1.35	19.7	0.01	8.063	26.444	35.321	43.877		471
40	7.357	34.121	4.03	73.7	41.3	1.73	24.9	0.01	7.359	26.605	35.449	44.048		530
50	5.746	33.995	2.85	40.6	63.5	2.29	32.8	0.01	5.715	26.787	35.807	44.428		590
60	4.659	34.042	1.59	22.1	88.4	2.75	39.5	0.00	4.614	26.959	36.033	44.714		650
70	4.100	34.129	0.89	12.2	175.8	2.99	42.7	0.00	4.040	27.089	36.191	44.899		710
80	3.795	34.206	0.54	7.3	119.6	3.09	44.1	0.00	3.720	27.183	36.300	45.012		770
90	3.450	34.299	0.30	4.0	132.1	3.15	45.1	0.00	3.379	27.290	36.424	45.152		830
100	2.943	34.452	0.32	4.3	150.5		45.4	0.00	2.956	27.461	36.620	45.311		890
110	2.635	34.544	0.95	12.7	155.0	3.04	43.8	0.00	2.530	27.563	36.738	45.514		950

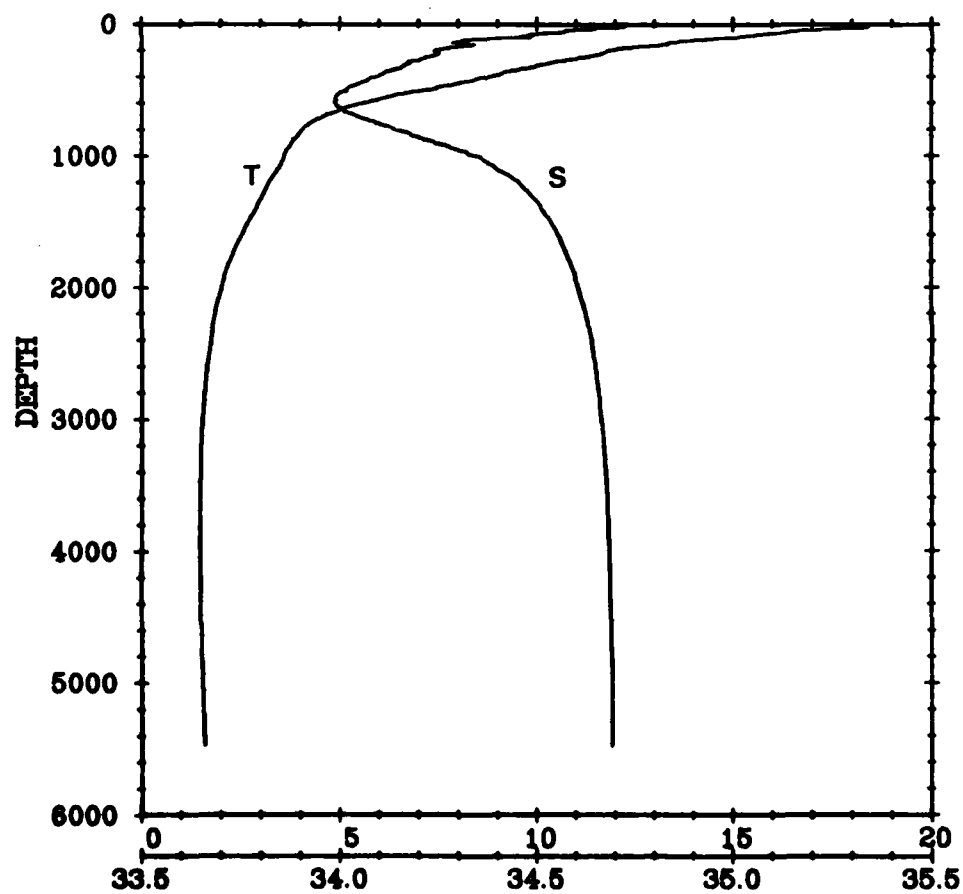
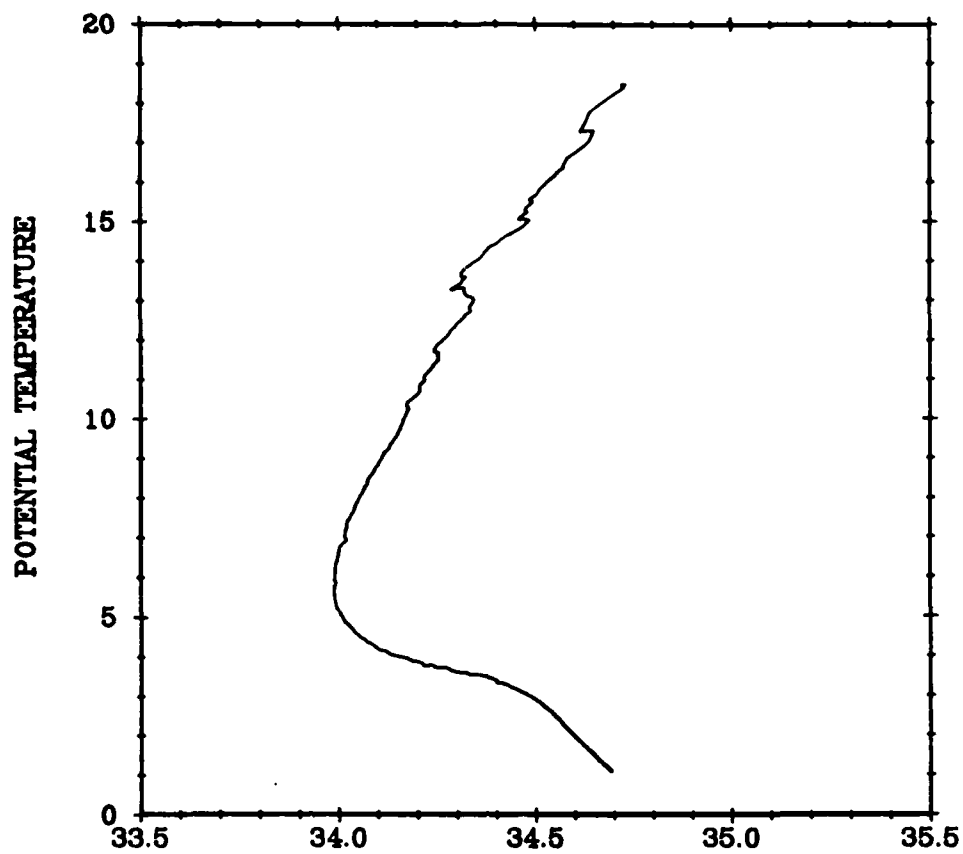
# MARATHON 2 STA. 35







# MARATHON 2 STA. 36

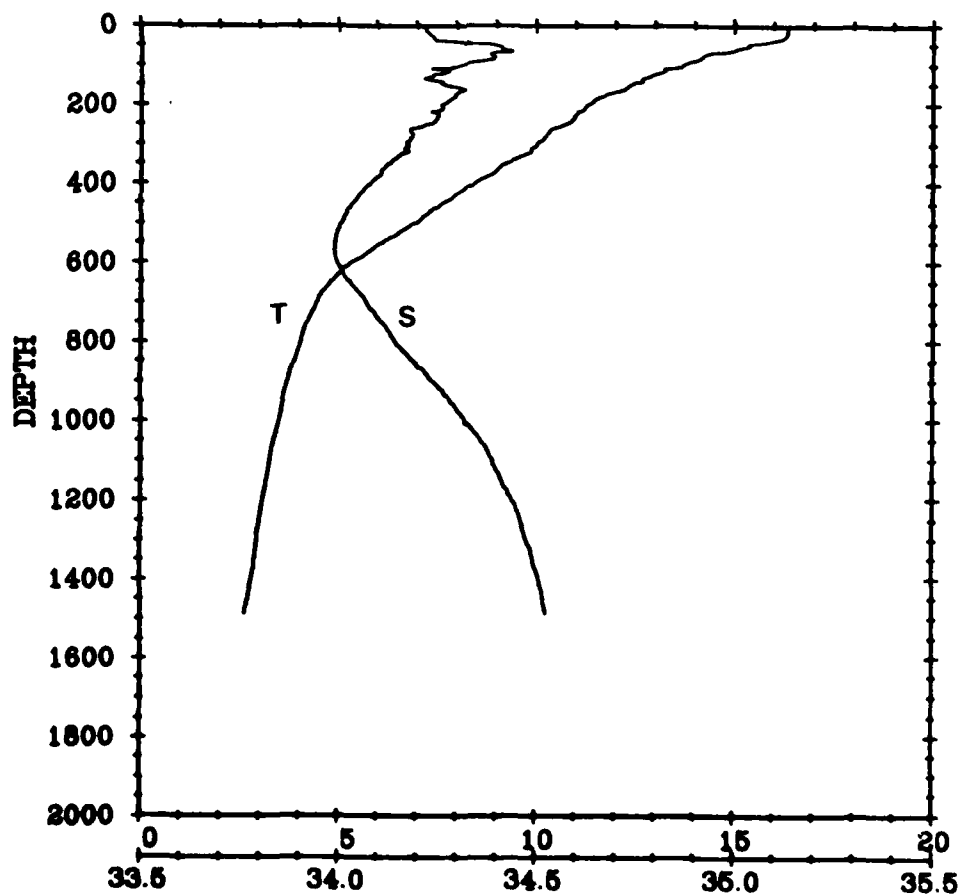
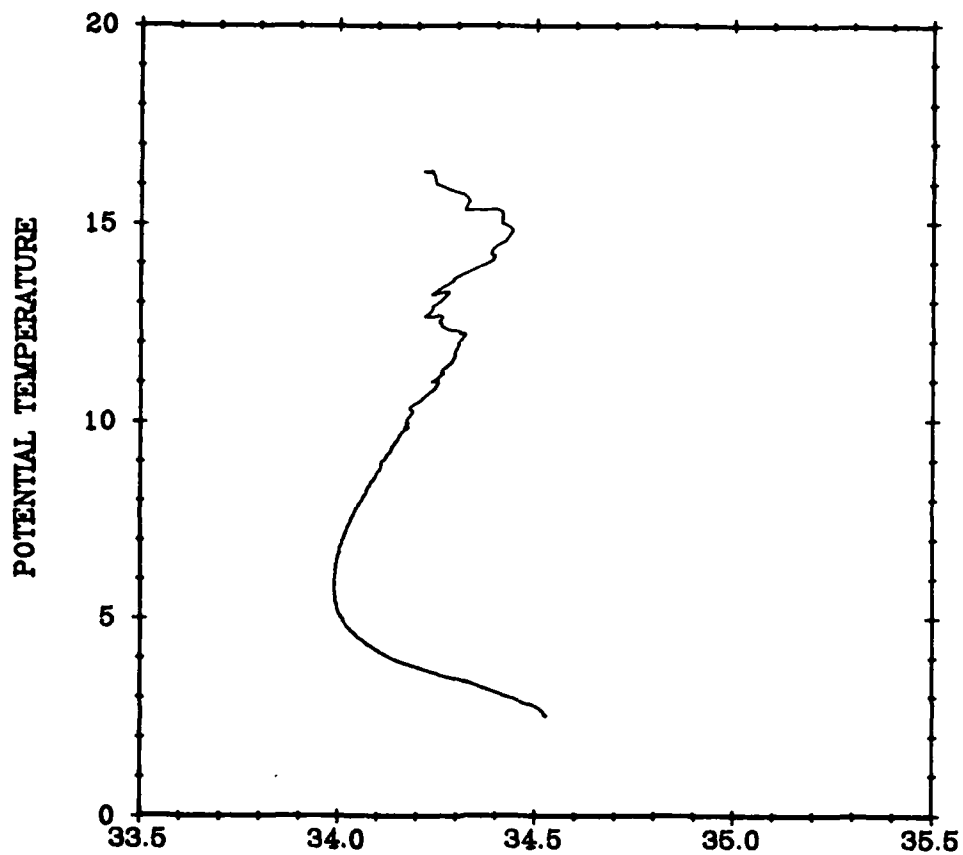


LATITUDE 14 10 00 N LONGITUDE 122 00 00 W WIND DIR 160 WIND SPEED 12 KTS AIR TEMP 24.4 C SURF TEMP 24.4 C SURF SAL 35.2

WTD DATA

DEPTH M	TEMP C	SALINITY	POT TEMP C	SIGMA 0	SIGMA 1	SIGMA 2	SIGMA 3	SIGMA 4	SIGMA 5	DYNAMIC HT CM	DEPTH M
0	24.4	35.2	24.4	25.074	33.650	41.860	49.148	56.448	63.748	0.00	0
10	24.3	35.2	24.3	25.085	33.660	41.870	49.158	56.458	63.758	0.00	10
20	24.2	35.2	24.2	25.096	33.670	41.880	49.168	56.468	63.768	0.00	20
30	24.1	35.2	24.1	25.107	33.680	41.890	49.178	56.478	63.778	0.00	30
40	24.0	35.2	24.0	25.118	33.690	41.900	49.188	56.488	63.788	0.00	40
50	23.9	35.2	23.9	25.129	33.700	41.910	49.198	56.498	63.798	0.00	50
60	23.8	35.2	23.8	25.140	33.710	41.920	49.208	56.508	63.808	0.00	60
70	23.7	35.2	23.7	25.151	33.720	41.930	49.218	56.518	63.818	0.00	70
80	23.6	35.2	23.6	25.162	33.730	41.940	49.228	56.528	63.828	0.00	80
90	23.5	35.2	23.5	25.173	33.740	41.950	49.238	56.538	63.838	0.00	90
100	23.4	35.2	23.4	25.184	33.750	41.960	49.248	56.548	63.848	0.00	100
110	23.3	35.2	23.3	25.195	33.760	41.970	49.258	56.558	63.858	0.00	110
120	23.2	35.2	23.2	25.206	33.770	41.980	49.268	56.568	63.868	0.00	120
130	23.1	35.2	23.1	25.217	33.780	41.990	49.278	56.578	63.878	0.00	130
140	23.0	35.2	23.0	25.228	33.790	42.000	49.288	56.588	63.888	0.00	140
150	22.9	35.2	22.9	25.239	33.800	42.010	49.298	56.598	63.898	0.00	150
160	22.8	35.2	22.8	25.250	33.810	42.020	49.308	56.608	63.908	0.00	160
170	22.7	35.2	22.7	25.261	33.820	42.030	49.318	56.618	63.918	0.00	170
180	22.6	35.2	22.6	25.272	33.830	42.040	49.328	56.628	63.928	0.00	180
190	22.5	35.2	22.5	25.283	33.840	42.050	49.338	56.638	63.938	0.00	190
200	22.4	35.2	22.4	25.294	33.850	42.060	49.348	56.648	63.948	0.00	200
210	22.3	35.2	22.3	25.305	33.860	42.070	49.358	56.658	63.958	0.00	210
220	22.2	35.2	22.2	25.316	33.870	42.080	49.368	56.668	63.968	0.00	220
230	22.1	35.2	22.1	25.327	33.880	42.090	49.378	56.678	63.978	0.00	230
240	22.0	35.2	22.0	25.338	33.890	42.100	49.388	56.688	63.988	0.00	240
250	21.9	35.2	21.9	25.349	33.900	42.110	49.398	56.698	63.998	0.00	250
260	21.8	35.2	21.8	25.360	33.910	42.120	49.408	56.708	64.008	0.00	260
270	21.7	35.2	21.7	25.371	33.920	42.130	49.418	56.718	64.018	0.00	270
280	21.6	35.2	21.6	25.382	33.930	42.140	49.428	56.728	64.028	0.00	280
290	21.5	35.2	21.5	25.393	33.940	42.150	49.438	56.738	64.038	0.00	290
300	21.4	35.2	21.4	25.404	33.950	42.160	49.448	56.748	64.048	0.00	300
310	21.3	35.2	21.3	25.415	33.960	42.170	49.458	56.758	64.058	0.00	310
320	21.2	35.2	21.2	25.426	33.970	42.180	49.468	56.768	64.068	0.00	320
330	21.1	35.2	21.1	25.437	33.980	42.190	49.478	56.778	64.078	0.00	330
340	21.0	35.2	21.0	25.448	33.990	42.200	49.488	56.788	64.088	0.00	340
350	20.9	35.2	20.9	25.459	34.000	42.210	49.498	56.798	64.098	0.00	350
360	20.8	35.2	20.8	25.470	34.010	42.220	49.508	56.808	64.108	0.00	360
370	20.7	35.2	20.7	25.481	34.020	42.230	49.518	56.818	64.118	0.00	370
380	20.6	35.2	20.6	25.492	34.030	42.240	49.528	56.828	64.128	0.00	380
390	20.5	35.2	20.5	25.503	34.040	42.250	49.538	56.838	64.138	0.00	390
400	20.4	35.2	20.4	25.514	34.050	42.260	49.548	56.848	64.148	0.00	400
410	20.3	35.2	20.3	25.525	34.060	42.270	49.558	56.858	64.158	0.00	410
420	20.2	35.2	20.2	25.536	34.070	42.280	49.568	56.868	64.168	0.00	420
430	20.1	35.2	20.1	25.547	34.080	42.290	49.578	56.878	64.178	0.00	430
440	20.0	35.2	20.0	25.558	34.090	42.300	49.588	56.888	64.188	0.00	440
450	19.9	35.2	19.9	25.569	34.100	42.310	49.598	56.898	64.198	0.00	450
460	19.8	35.2	19.8	25.580	34.110	42.320	49.608	56.908	64.208	0.00	460
470	19.7	35.2	19.7	25.591	34.120	42.330	49.618	56.918	64.218	0.00	470
480	19.6	35.2	19.6	25.602	34.130	42.340	49.628	56.928	64.228	0.00	480
490	19.5	35.2	19.5	25.613	34.140	42.350	49.638	56.938	64.238	0.00	490
500	19.4	35.2	19.4	25.624	34.150	42.360	49.648	56.948	64.248	0.00	500
510	19.3	35.2	19.3	25.635	34.160	42.370	49.658	56.958	64.258	0.00	510
520	19.2	35.2	19.2	25.646	34.170	42.380	49.668	56.968	64.268	0.00	520
530	19.1	35.2	19.1	25.657	34.180	42.390	49.678	56.978	64.278	0.00	530
540	19.0	35.2	19.0	25.668	34.190	42.400	49.688	56.988	64.288	0.00	540
550	18.9	35.2	18.9	25.679	34.200	42.410	49.698	56.998	64.298	0.00	550
560	18.8	35.2	18.8	25.690	34.210	42.420	49.708	57.008	64.308	0.00	560
570	18.7	35.2	18.7	25.701	34.220	42.430	49.718	57.018	64.318	0.00	570
580	18.6	35.2	18.6	25.712	34.230	42.440	49.728	57.028	64.328	0.00	580
590	18.5	35.2	18.5	25.723	34.240	42.450	49.738	57.038	64.338	0.00	590
600	18.4	35.2	18.4	25.734	34.250	42.460	49.748	57.048	64.348	0.00	600
610	18.3	35.2	18.3	25.745	34.260	42.470	49.758	57.058	64.358	0.00	610
620	18.2	35.2	18.2	25.756	34.270	42.480	49.768	57.068	64.368	0.00	620
630	18.1	35.2	18.1	25.767	34.280	42.490	49.778	57.078	64.378	0.00	630
640	18.0	35.2	18.0	25.778	34.290	42.500	49.788	57.088	64.388	0.00	640
650	17.9	35.2	17.9	25.789	34.300	42.510	49.798	57.098	64.398	0.00	650
660	17.8	35.2	17.8	25.800	34.310	42.520	49.808	57.108	64.408	0.00	660
670	17.7	35.2	17.7	25.811	34.320	42.530	49.818	57.118	64.418	0.00	670
680	17.6	35.2	17.6	25.822	34.330	42.540	49.828	57.128	64.428	0.00	680
690	17.5	35.2	17.5	25.833	34.340	42.550	49.838	57.138	64.438	0.00	690
700	17.4	35.2	17.4	25.844	34.350	42.560	49.848	57.148	64.448	0.00	700
710	17.3	35.2	17.3	25.855	34.360	42.570	49.858	57.158	64.458	0.00	710
720	17.2	35.2	17.2	25.866	34.370	42.580	49.868	57.168	64.468	0.00	720
730	17.1	35.2	17.1	25.877	34.380	42.590	49.878	57.178	64.478	0.00	730
740	17.0	35.2	17.0	25.888	34.390	42.600	49.888	57.188	64.488	0.00	740
750	16.9	35.2	16.9	25.899	34.400	42.610	49.898	57.198	64.498	0.00	750
760	16.8	35.2	16.8	25.910	34.410	42.620	49.908	57.208	64.508	0.00	760
770	16.7	35.2	16.7	25.921	34.420	42.630	49.918	57.218	64.518	0.00	770
780	16.6	35.2	16.6	25.932	34.430	42.640	49.928	57.228	64.528	0.00	780
790	16.5	35.2	16.5	25.943	34.440	42.650	49.938	57.238	64.538	0.00	790
800	16.4	35.2	16.4	25.954	34.450	42.660	49.948	57.248	64.548	0.00	800
810	16.3	35.2	16.3	25.965	34.460	42.670	49.958	57.258	64.558	0.00	810
820	16.2	35.2	16.2	25.976	34.470	42.680	49.968	57.268	64.568	0.00	820
830	16.1	35.2	16.1	25.987	34.480	42.690	49.978	57.278	64.578	0.00	830
840	16.0	35.2	16.0	25.998	34.490	42.700	49.988	57.288	64.588	0.00	840
850	15.9	35.2	15.9	26.009	34.500	42.710	49.998	57.298	64.598	0.00	850
860	15.8	35.2	15.8	26.020	34.510	42.720	50.008	57.308	64.608	0.00	860
870	15.7	35.2	15.7	26.031	34.520	42.730	50.018	57.318	64.618	0.00	870
880	15.6	35.2	15.6	26.042	34.530	42.740	50.028	57.328	64.628	0.00	880
890	15.5	35.2	15.5	26.053	34.540	42.750	50.038	57.338	64.638	0.00	890
900	15.4	35.2	15.4	26.064	34.550	42.760	50.048	57.348	64.648	0.00	900
910	15.3	35.2	15.3	26.075	34.560	42.770	50.058	57.358	64.658	0.00	910
920	15.2	35.2	15.2	26.086	34.570	42.780	50.068	57.368	64.668	0.00	920
930	15.1	35.2	15.1	26.097	34.580	42.790	50.078	57.378	64.678	0.00	930
940	15.0	35.2	15.0	26.108	34.590	42.800	50.088	57.388	64.688	0.00	940
950	14.9	35.2	14.9	26.119	34.600	42.810	50.098	57.398	64.698	0.00	950
960	14.8	35.2	14.8	26.130	34.610	42.820	50.108	57.408	64.708	0.00	960
970	14.7	35.2	14.7	26.141	34.620	42.830	50.118	57.418	64.718	0.00	

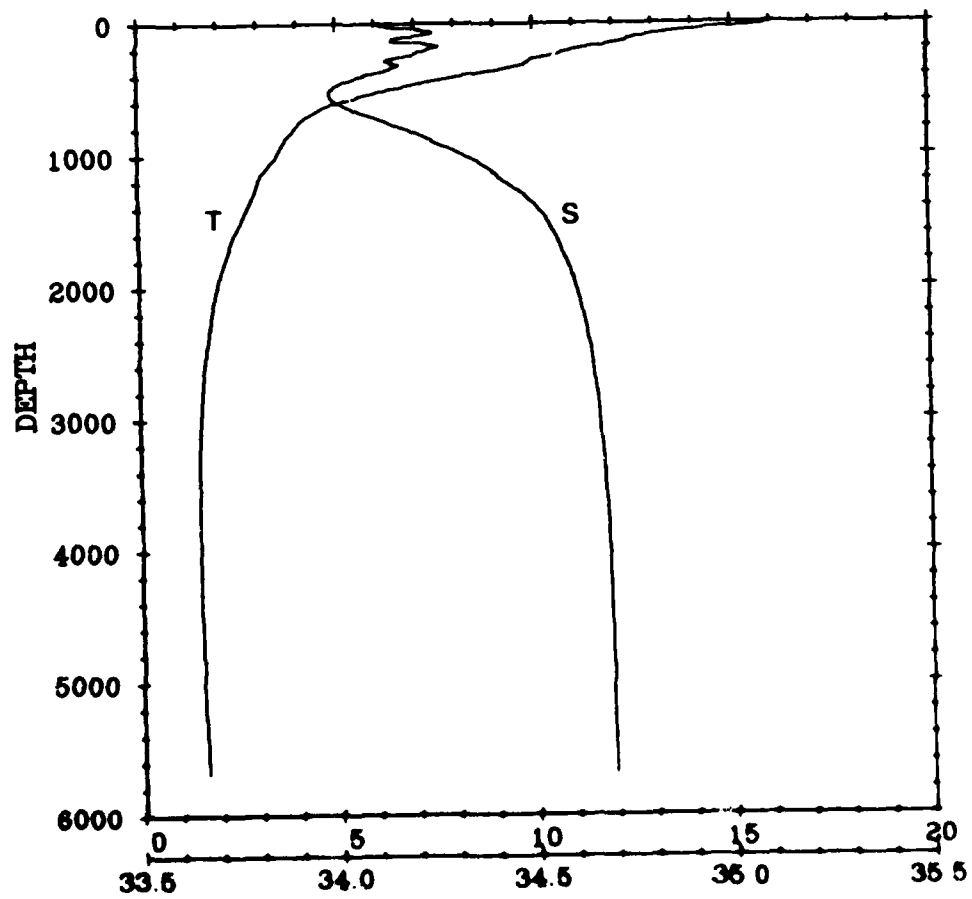
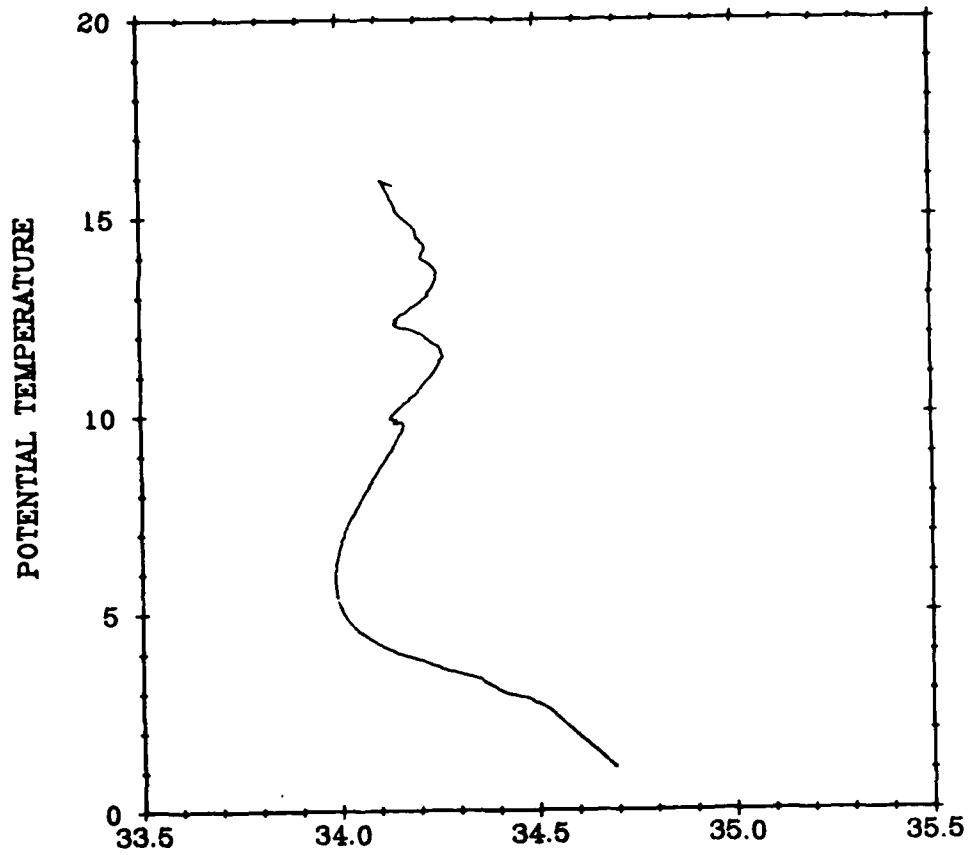
# MARATHON 2 STA. 37



[illegible][illegible]

WIGGIN BUTTLE DATA															
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	P04	NO3	NO2	TRIT	PHT	TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TURIN	DEG C					DB
1	11.356	34.210	5.68	101.2	6.4	0.16	0.0	0.10		15.354	25.174	13.657	41.889		1
5	11.242	34.217	5.72	102.9	6.4	0.26	1.2	0.29		13.814	21.622	14.231	42.494		5
10	11.099	34.270	5.82	96.9	7.2	0.44	4.7	0.14		12.184	21.319	14.350	42.936		10
15	11.052	34.213	5.56	91.1	10.7	0.65	9.6	0.11		11.342	24.24	14.359	43.113		15
20	11.100	34.216	5.58	89.4	14.6	0.82	11.3	0.10		10.65	29.427	14.407	43.471		20
25	11.112	34.264	5.26	92.5	20.2	1.15	14.9	0.10		9.917	24.114	15.105	43.457		25
30	9.818	34.377	4.45	67.1	13.8	1.53	21.7	0.00		8.116	26.919	13.916	43.961		30
35	6.330	33.994	3.33	48.9	51.6	2.06	29.4	0.10		6.444	26.919	16.044	44.748	50.8	35
40	7.271	33.939	2.35	3.1	74.0	2.51	15.7	0.10		4.454	27.102	16.097	44.769	70.8	40
45	3.478	34.168	1.32	19.2	93.8		40.9	0.10		3.899	27.119	16.248	44.951	91.0	45
50	3.379	34.173	0.67	9.2	111.8	3.05	43.7	0.10		3.452	27.231	16.356	45.171	91.1	50
55	3.659	34.254	0.37	5.0	121.3	1.11	44.6	0.10		3.199	27.315	16.451	45.176	101.2	55
60	3.462	34.354	1.23	1.1	121.3	1.23	45.3	0.10		2.889	27.418	16.616	45.165	126.5	60
65	2.919	34.453	0.94	4.8	143.6	1.27	45.3	0.10		2.491	27.418	16.715	45.154	151.8	65
70	2.939	34.453	1.16	11.1	158.2	1.13	44.4	0.10		2.172	27.423	16.829	45.617	177.2	70
75	2.152	34.519	1.21	15.8	164.3	1.11	44.1	0.10		1.741	27.423	16.886	47.148	177.2	75
80	2.450	34.547	1.07	4.4	171.2	2.93	44.7	0.10		1.701	27.425	16.847	46.911	207.2	80
85	1.681	34.547	4.24	49.3	2.2	4.1	4.1	0.10		2.14	26.846	16.846	47.422	144.4	85
90	1.491	34.655	5.14	47.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	90
95	1.491	34.607	5.23	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	95
100	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	100
105	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	105
110	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	110
115	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	115
120	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	120
125	1.491	34.693	5.16	49.3	4.6	2.62	8.4	0.10		1.747	27.119	16.944	46.944	144.4	125

# MARATHON 2 STA. 38



WICKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	LOG ST	NO DAT	NO1	NO4	NO3	NO2	DRIFT	ROT TEMP	SIGMA T	SIGMA 2	SIGMA 4	ANALYST
M	DEG C	PROMT	ML C		MM L	MM L	MM L	MM L	MM L	DEG C				LM
1	14.719	34.719	9.35	1.4	9	1.12	1.1	1.00	16.170	24.910	11.24	11.24	11.24	
5	14.474	34.474	9.34	1.5	5	1.20	1.1	1.00	14.719	25.216	11.44	11.44	11.44	
10	14.172	34.172	9.34	1.9	4	1.17	1.0	0.91	13.191	25.447	11.42	11.42	11.42	
12	14.431	34.431	9.34	1.5	4	1.48	1.1	1.02	12.466	25.318	11.44	11.44	11.44	
15	14.212	34.212	9.33	1.1	1	1.74	1.4	1.02	12.137	25.137	11.44	11.44	11.44	
20	14.022	34.022	9.29	1.0	1	1.84	1.1	1.01	11.748	25.203	11.44	11.44	11.44	
25	13.754	34.753	9.41	35.3	16.6	1.98	1.1	0.01	11.266	26.219	11.47	11.47	11.47	
30	9.514	34.319	9.17	30.7	20.3	1.13	1.5	0.01	9.500	26.347	11.18	11.18	11.18	
40	9.112	34.317	4.61	39.3	31.0	1.46	2.0	0.00	9.269	26.579	11.48	11.48	11.48	
50	6.547	34.446	1.65	32.3	50.6	2.32	2.8	0.00	4.545	26.524	11.44	11.44	11.44	
60	5.427	34.301	2.49	15.1	74.7	2.49	3.0	0.00	5.118	26.914	11.42	11.42	11.42	
70	4.422	34.320	1.44	10.2	94.7	2.83	4.0	0.00	4.363	27.119	11.76	11.76	11.76	
80	3.922	34.203	0.77	10.1	111.7	1.05	1.3	0.00	3.961	27.114	11.24	11.24	11.24	
90	3.530	34.243	0.42	5.7	125.3	1.15	1.6	0.00	3.705	27.216	11.14	11.14	11.14	
100	3.319	34.313	0.25	3.4	136.1	1.21	1.6	0.00	3.299	27.216	11.44	11.44	11.44	
125	2.953	34.466	0.17	4.9	148.6	1.23	1.5	0.00	2.445	27.411	11.61	11.61	11.61	
150	2.702	34.533	0.14	9.8	159.0		1.4	0.00	2.464	27.544	11.74	11.74	11.74	

AD-A189 930

PHYSICAL CHEMICAL AND CTD

(CONDUCTIVITY/TEMPERATURE/DEPTH) DATA FROM THE. (U)

2/3

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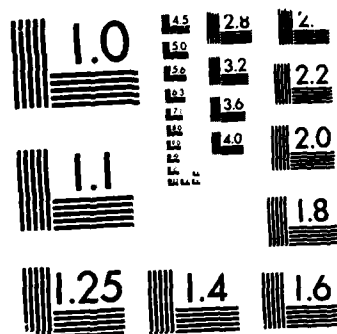
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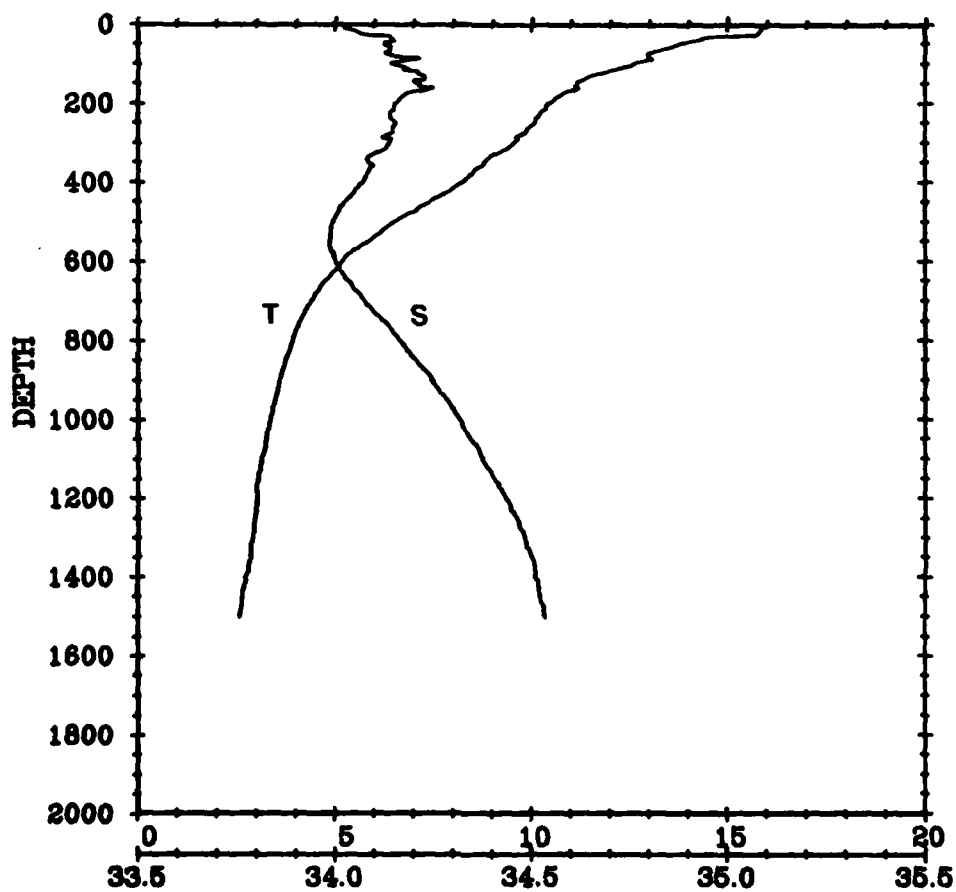
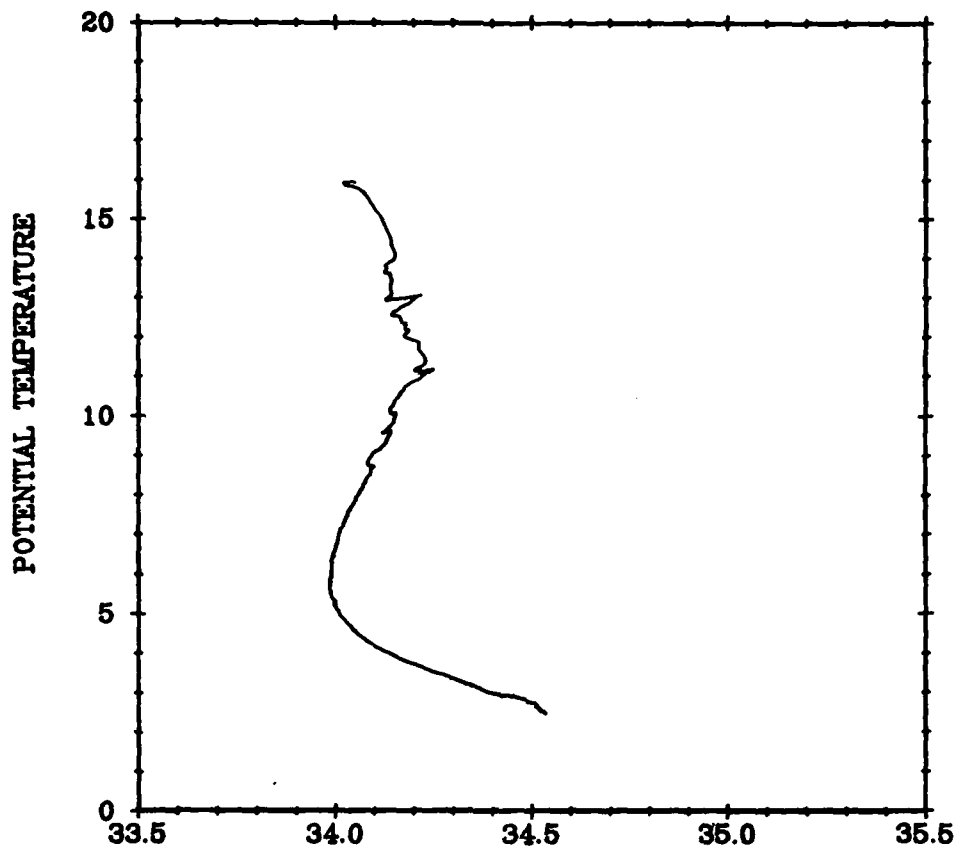
A 10x10 grid of squares, with the top-left square missing, representing a 10x10 grid with a 1x1 hole.



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A



# MARATHON 2 STA. 39



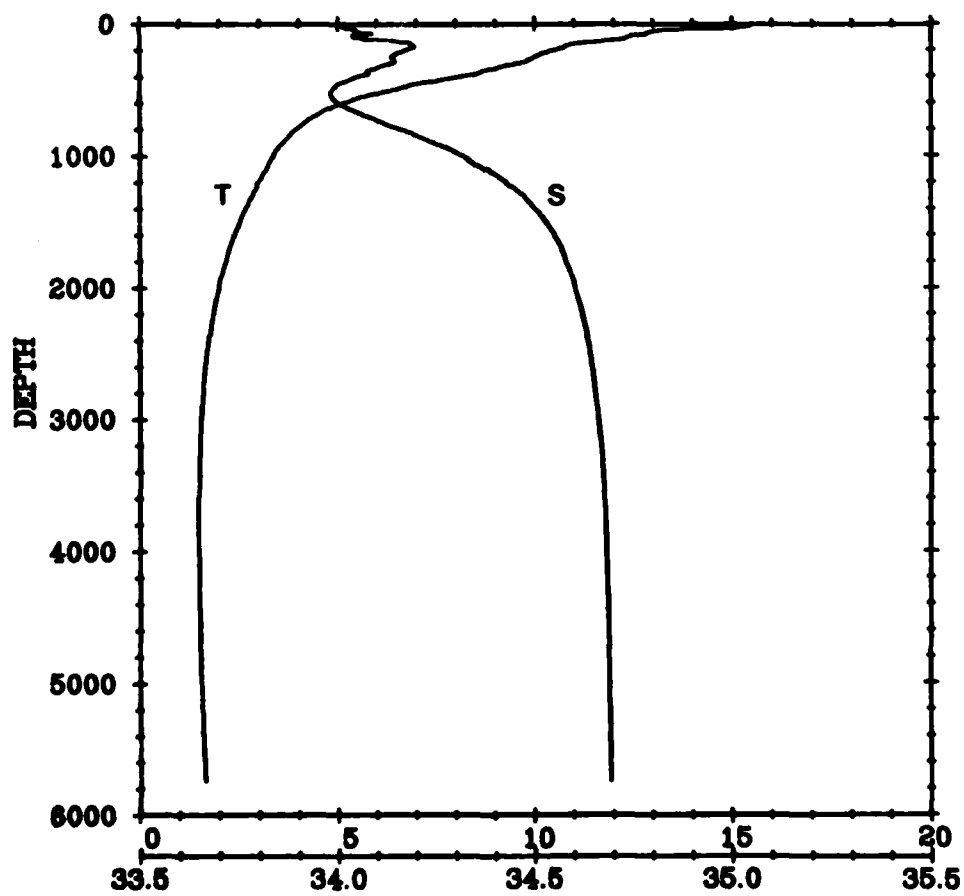
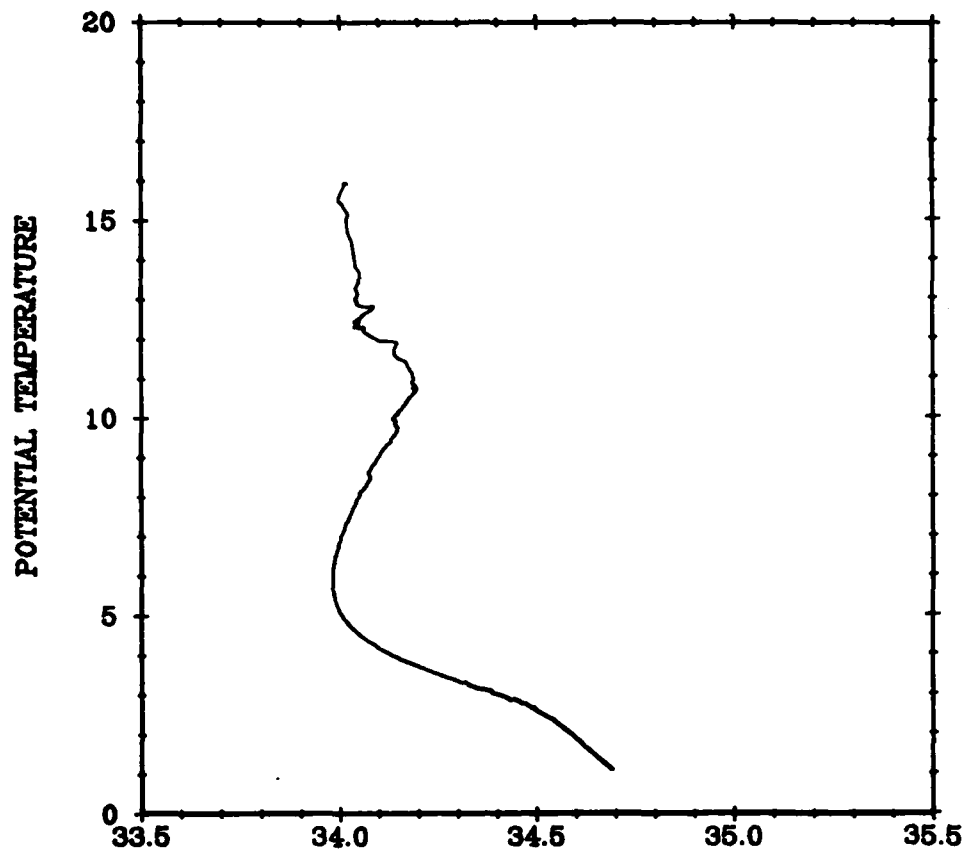
R/V THOMAS WASHINGTON MARATHON LEG II STATION 40

LATITUDE	LONGITUDE	NOV/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
35 0 0N	151 59 2W	5/17/84	324	5722	220	10	15 6	14 4	1019 0

CTD DATA	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
PRESS DB	TEMP DEG C	TEMP DEG C				CL/TON		M
0	15.912	34.010	15.912	25.030	33.629	41.856	291.962	0.000
20	15.358	34.008	15.355	25.110	33.746	41.988	283.014	0.057
40	14.285	34.032	14.279	25.331	34.036	42.114	259.679	0.112
60	12.991	34.045	12.985	25.657	34.360	42.584	233.942	0.161
80	12.694	34.065	12.683	25.732	34.447	42.781	227.313	0.207
100	12.377	34.046	12.364	25.779	34.507	42.853	223.287	0.252
120	11.390	34.181	11.072	25.125	34.903	43.296	191.197	0.356
140	10.509	34.176	10.484	25.226	35.028	43.444	182.959	0.450
160	10.021	34.137	9.992	25.290	35.103	43.539	178.623	0.540
180	9.613	34.139	9.579	25.350	35.191	43.544	172.795	0.628
200	9.874	34.087	8.836	25.429	35.304	43.787	165.920	0.712
220	8.162	34.055	8.121	25.514	35.420	43.934	158.191	0.793
240	7.206	34.009	7.163	26.616	35.567	44.123	149.511	0.870
260	6.493	33.985	6.439	26.695	35.680	44.268	141.051	0.942
280	5.182	33.996	5.133	26.864	35.913	44.561	124.707	1.075
300	4.424	34.065	4.371	27.004	36.091	44.774	111.399	1.193
320	3.951	34.151	3.892	27.122	36.232	44.936	100.469	1.299
340	3.619	34.233	3.555	27.221	36.347	45.066	91.392	1.395
360	3.352	34.309	3.282	27.307	36.447	45.179	83.448	1.483
380	3.178	34.363	3.101	27.357	36.515	45.256	78.158	1.564
400	2.989	34.420	2.905	27.411	36.588	45.337	72.438	1.639
420	2.849	34.466	2.759	27.481	36.645	45.401	69.050	1.709
440	2.682	34.496	2.586	27.520	36.693	45.457	64.497	1.775
460	2.526	34.525	2.424	27.557	36.738	45.510	61.101	1.838
480	2.389	34.548	2.280	27.587	36.776	45.555	58.327	1.898
500	2.263	34.565	2.148	27.612	36.808	45.594	56.009	1.955
520	2.174	34.578	2.052	27.629	36.831	45.621	54.531	2.010
540	2.074	34.591	1.945	27.648	36.855	45.651	52.817	2.054
560	1.986	34.602	1.850	27.655	36.876	45.677	51.363	2.105
580	1.920	34.610	1.776	27.677	36.892	45.696	50.362	2.157
600	1.850	34.619	1.699	27.690	36.910	45.717	49.216	2.217
620	1.790	34.626	1.631	27.700	36.924	45.735	48.316	2.265
640	1.741	34.634	1.574	27.711	36.938	45.752	47.459	2.313
660	1.696	34.639	1.521	27.719	36.948	45.765	46.952	2.360
680	1.657	34.642	1.474	27.727	36.959	45.778	46.234	2.407
700	1.625	34.649	1.434	27.733	36.968	45.789	45.937	2.453
720	1.597	34.653	1.397	27.739	36.975	45.798	45.480	2.499
740	1.574	34.657	1.365	27.745	36.983	45.807	45.179	2.544
760	1.547	34.661	1.329	27.750	36.990	45.817	44.813	2.589
780	1.530	34.664	1.303	27.755	36.996	45.824	44.647	2.634
800	1.516	34.667	1.280	27.759	37.001	45.830	44.516	2.678
820	1.504	34.669	1.258	27.762	37.006	45.836	44.478	2.723
840	1.493	34.672	1.237	27.766	37.011	45.842	44.377	2.767
860	1.488	34.674	1.222	27.768	37.014	45.846	44.432	2.812
880	1.481	34.676	1.205	27.771	37.018	45.850	44.452	2.856
900	1.474	34.679	1.188	27.774	37.022	45.855	44.468	2.901
920	1.471	34.680	1.174	27.776	37.025	45.859	44.542	2.945
940	1.472	34.681	1.165	27.778	37.027	45.862	44.746	2.990
960	1.474	34.682	1.156	27.779	37.029	45.864	44.965	3.035
980	1.478	34.683	1.149	27.781	37.030	45.866	45.215	3.080
1000	1.483	34.683	1.142	27.781	37.031	45.867	45.552	3.125
1020	1.487	34.685	1.135	27.783	37.034	45.870	45.731	3.171
1040	1.493	34.685	1.130	27.784	37.034	45.871	46.084	3.217
1060	1.499	34.686	1.124	27.785	37.036	45.873	46.368	3.263
1080	1.504	34.687	1.117	27.786	37.037	45.875	46.635	3.309
1100	1.512	34.687	1.113	27.786	37.038	45.875	47.023	3.356
1120	1.519	34.687	1.108	27.787	37.039	45.875	47.395	3.403
1140	1.527	34.688	1.104	27.788	37.040	45.878	47.716	3.451
1160	1.535	34.688	1.099	27.788	37.040	45.879	48.108	3.499
1180	1.545	34.688	1.097	27.788	37.041	45.879	48.536	3.547
1200	1.555	34.689	1.094	27.789	37.042	45.880	48.997	3.596
1220	1.566	34.689	1.092	27.789	37.042	45.881	49.347	3.645
1240	1.577	34.690	1.090	27.790	37.043	45.882	49.731	3.695
1260	1.589	34.690	1.089	27.790	37.043	45.882	50.204	3.745
1280	1.602	34.690	1.089	27.790	37.043	45.882	50.698	3.795
1300	1.615	34.690	1.088	27.790	37.043	45.882	51.194	3.846
1320	1.628	34.690	1.088	27.790	37.043	45.882	51.694	3.897
1340	1.637	34.691	1.089	27.791	37.044	45.883	51.944	3.927

NISKIN BOTTLE DATA									
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TU8IN
1	15.985	34.027	5.87	104.4	5.0	0.20	0.0	0.00	15.885
56	13.065	34.041	6.11	102.5	4.7	0.28	0.7	0.44	13.057
105	12.564	34.093	5.74	95.4	5.3	0.42	4.3	0.22	12.550
155	11.232	34.236	5.48	88.6	12.2	0.78	10.8	0.01	11.213
204	10.617	34.201	5.55	89.6	11.8	0.78	11.7	0.01	10.592
254	9.662	34.141	5.25	82.0	19.6	1.07	15.1	0.20	9.627
304	7.991	34.045	4.48	67.3	33.6	1.51	21.8	0.20	7.950
354	6.492	33.987	3.53	51.2	51.5	1.99	28.6	0.20	6.446
404	5.160	34.999	2.34	32.9	75.4	2.44	35.6	0.01	5.111
454	4.413	34.068	1.42	19.6	94.1	2.79	40.3	0.00	4.359
504	3.913	34.158	0.75	12.2	111.3	3.00	43.3	0.00	3.854
554	3.563	34.250	0.40	5.4	126.7	3.09	44.7	0.00	3.499
604	3.323	34.315	0.26	3.5	137.0	3.17	45.3	0.00	3.253
654	2.980	34.442	0.25	3.3	152.3	3.10	44.6	0.00	2.794
704	2.548	34.532	0.73	9.6	158.4	3.10	44.6	0.00	2.445
754	2.214	34.576	1.13	14.8	169.6	3.02	43.6	0.00	2.095
804	1.973	34.604	1.46	19.0	175.2	2.95	42.7	0.00	1.838
854	1.679	34.643	2.16	27.9	176.3	2.80	40.8	0.00	1.506
904	1.533	34.664	2.76	35.4	168.8	2.69	39.1	0.00	1.317
954	1.482	34.677	3.11	39.8	165.8	2.60	38.1	0.00	1.219
1004	1.471	34.683	3.33	42.6	163.3	2.56	37.3	0.00	1.155
1054	1.505	34.687	3.48	44.5	158.9	2.53	37.1	0.00	1.119
1104	1.555	34.690	3.61	46.1			36.6	0.00	1.094
1154	1.637	34.691			152.8	2.50	36.5	0.00	1.088

# MARATHON 2 STA. 40



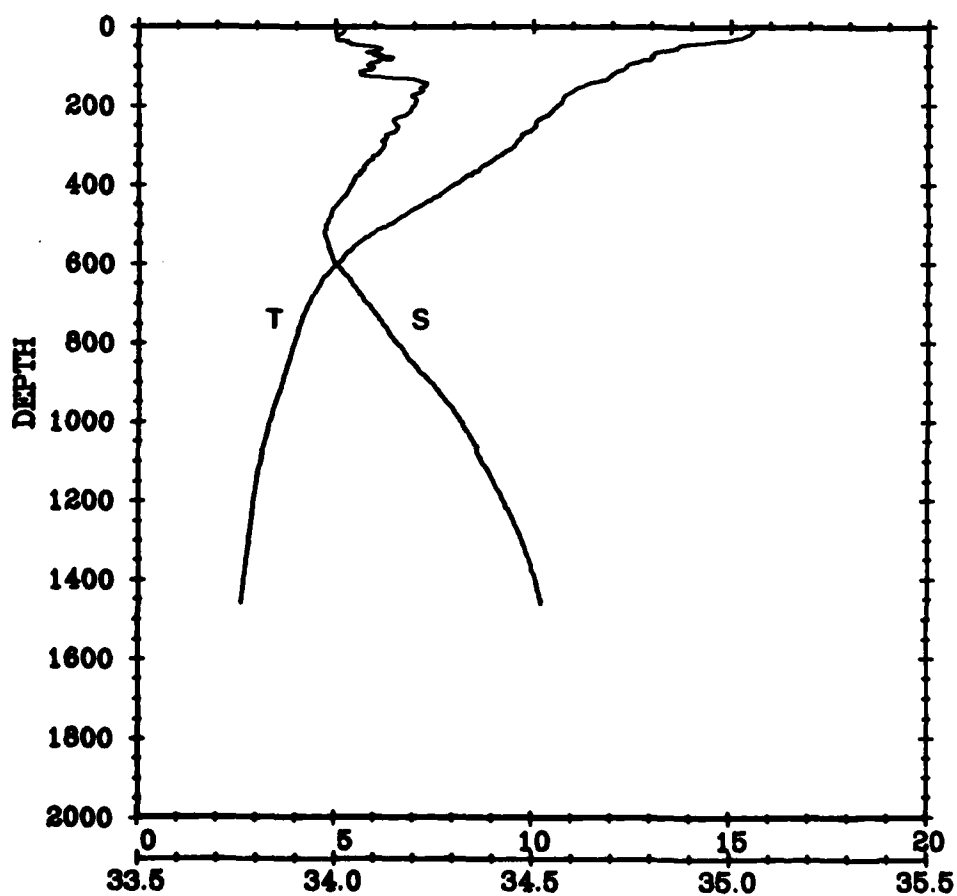
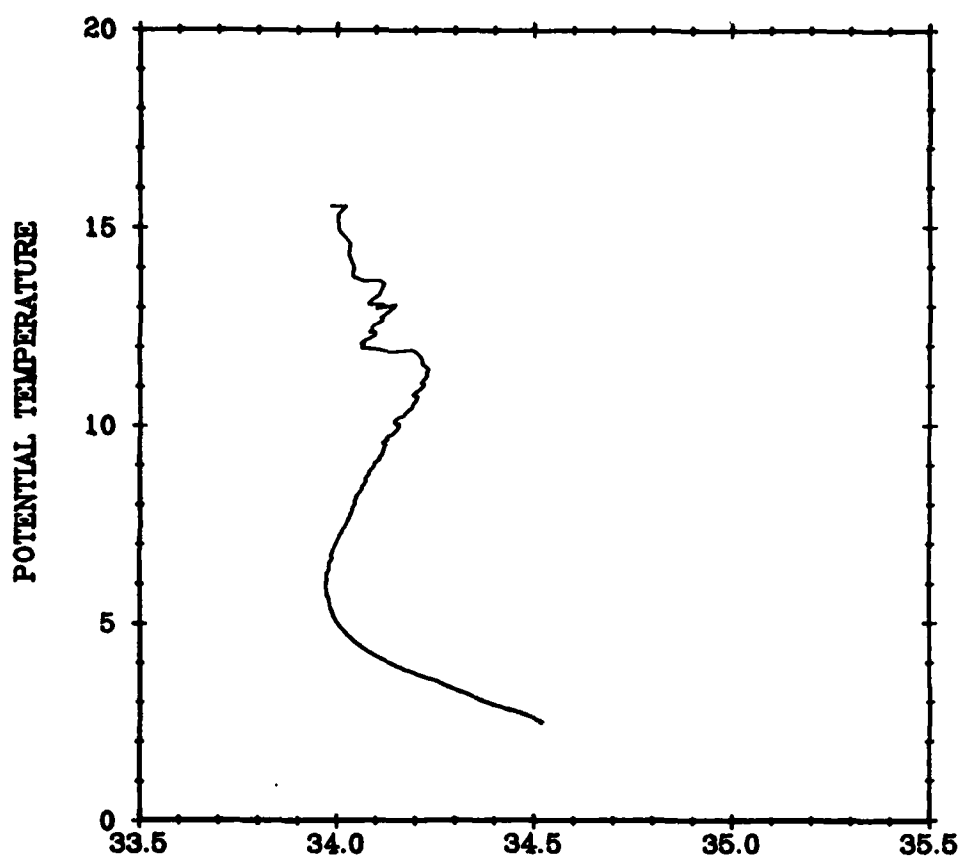
R/V THOMAS WASHINGTON MARATHON LEG II STATION 41

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BARCH
15 10 1N	151 59 5W	5/17/84	0942	579	DIR	KT	DEG C	DEG C	MB
					220	12	16.1	15.6	1017.6

CTD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CL/TON			M
0	15.545	34.315	15.545	25.093	33.702	41.938	285.930	0.000		0
20	15.422	34.313	15.399	25.124	33.739	41.979	283.575	0.457		19
40	14.451	34.329	14.445	25.344	33.992	42.265	263.255	0.112		39
60	13.457	34.397	13.399	25.514	34.301	42.609	238.065	0.162		59
80	12.949	34.422	12.933	25.726	34.430	42.744	227.935	0.208		79
100	12.419	34.094	12.406	25.808	34.534	42.878	220.531	0.251		99
150	11.327	34.222	11.308	26.114	34.882	43.265	192.521	0.156		149
200	10.610	34.200	10.606	26.223	35.020	43.430	183.158	0.450		198
250	10.050	34.153	10.021	26.287	35.109	43.544	177.922	0.541		248
300	9.532	34.121	9.499	26.150	35.194	43.630	172.805	0.628		298
350	8.813	34.081	8.776	25.434	35.311	43.797	165.316	0.713		347
400	8.056	34.042	8.015	25.319	35.431	43.949	157.574	0.794		397
450	7.257	34.007	7.214	26.607	35.556	44.109	149.378	0.870		447
500	6.420	33.978	6.375	26.697	35.686	44.277	140.726	0.943		496
600	5.091	33.997	5.043	26.875	35.929	44.581	123.519	1.075		595
700	4.337	34.077	4.284	27.022	36.113	44.800	109.566	1.192		694
800	3.957	34.151	3.898	27.121	36.231	44.935	100.517	1.297		793
900	3.645	34.235	3.580	27.220	36.344	45.063	91.528	1.393		892
1000	3.328	34.313	3.258	27.313	36.453	45.186	82.881	1.480		991
1100	3.112	34.367	3.036	27.377	36.528	45.271	77.116	1.560		1090
1200	2.928	34.421	2.845	27.437	36.597	45.349	71.673	1.634		1189
1300	2.796	34.467	2.707	27.486	36.653	45.412	67.371	1.704		1288
1400	2.668	34.502	2.572	27.526	36.699	45.464	63.893	1.769		1386
1474	2.571	34.521	2.470	27.549	36.729	45.498	61.778	1.816		1459

WINKIN BOTTLE DATA	DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	ML/L	ML/L	UM/L	UM/L	UM/L	UM/L	TU9LN	DEG C				DB
0	15.543	34.225	5.91	104.4	5.8	0.20	0.0	0.00		15.543	25.101	33.710	41.946		0
52	13.381	34.334	6.24	103.5	5.5	0.23	0.0	0.02		13.374	25.570	34.259	42.568		52
122	12.426	34.284	5.95	98.6	6.5	0.47	3.3	0.32		12.402	25.801	34.526	42.871		122
135	11.944	34.222	5.52	90.6	10.6	0.69	9.6	0.31		11.907	25.987	34.731	43.092		135
148	11.041	34.220	5.51	88.7	13.6	0.95	11.2	0.31		11.020	26.155	34.944	43.339		148
201	10.632	34.199	5.53	88.3	14.4	0.88	11.7	0.31		10.608	26.222	35.018	43.429		201
252	10.055	34.152	5.50	86.7	17.0	0.97	13.0	0.31		10.036	26.284	35.105	43.538		252
302	9.603	34.129	5.32	83.0	20.3	1.10	14.8	0.00		9.569	26.344	35.196	43.639		302
401	7.866	34.040	4.42	66.2	35.2	1.60	22.4	0.00		7.825	26.546	35.466	43.992		401
502	6.154	33.975	3.37	48.5	56.2	2.15	30.0	0.00		6.110	26.729	35.730	44.333		502
602	4.901	34.712	2.10	29.3	81.8	2.66	37.3	0.00		4.853	26.909	35.971	44.632		606
702	4.265	34.089	1.26	17.3	100.7	2.97	41.5	0.00		4.212	27.039	36.133	44.923		707
802	3.925	34.158	0.78	10.6	112.0	3.09	43.6	0.00		3.865	27.130	36.241	44.946		808
893	3.652	34.228	0.49	6.6	124.1	3.17	44.7	0.00		3.597	27.212	36.336	45.054		900
988	3.159	34.305	0.27	3.6	135.7	3.23	45.5	0.00		3.289	27.303	36.442	45.174		996
1225	2.891	34.437	0.26	3.5	154.9	3.26	46.0	0.00		2.806	27.451	36.615	45.369		1236
1458	2.573	34.521	0.67	8.9	163.3		45.2	0.00		2.472	27.549	36.728	45.498		1472

# MARATHON 2 STA. 41

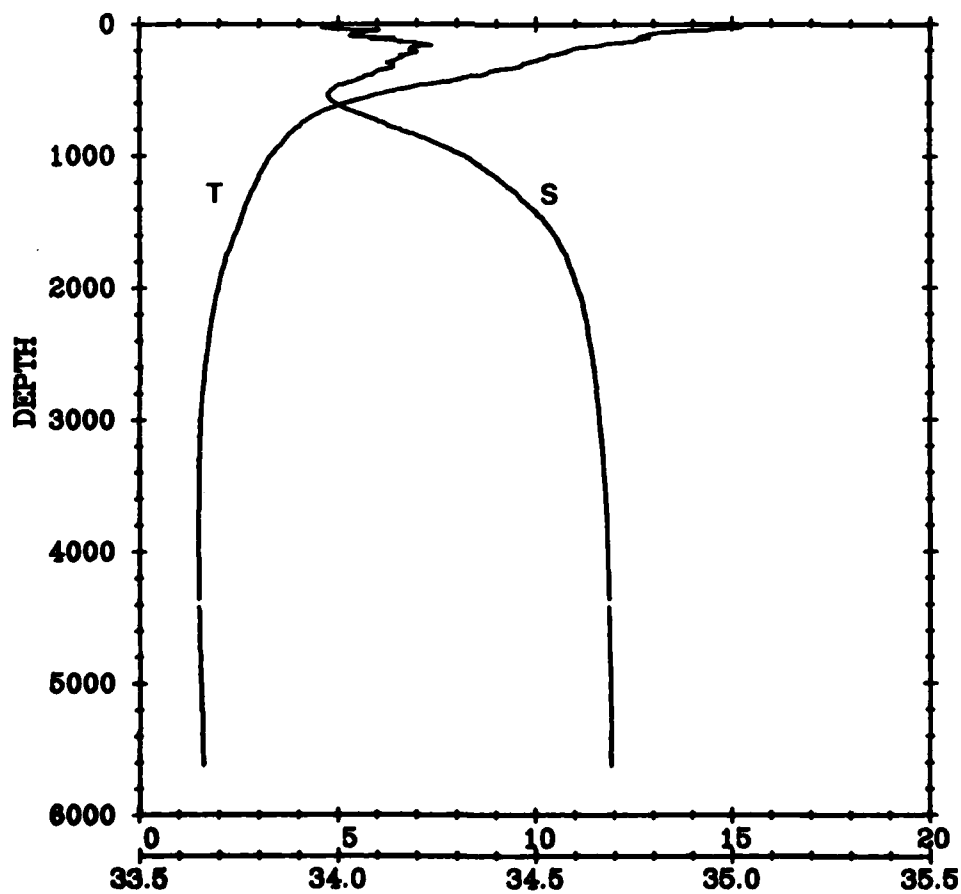
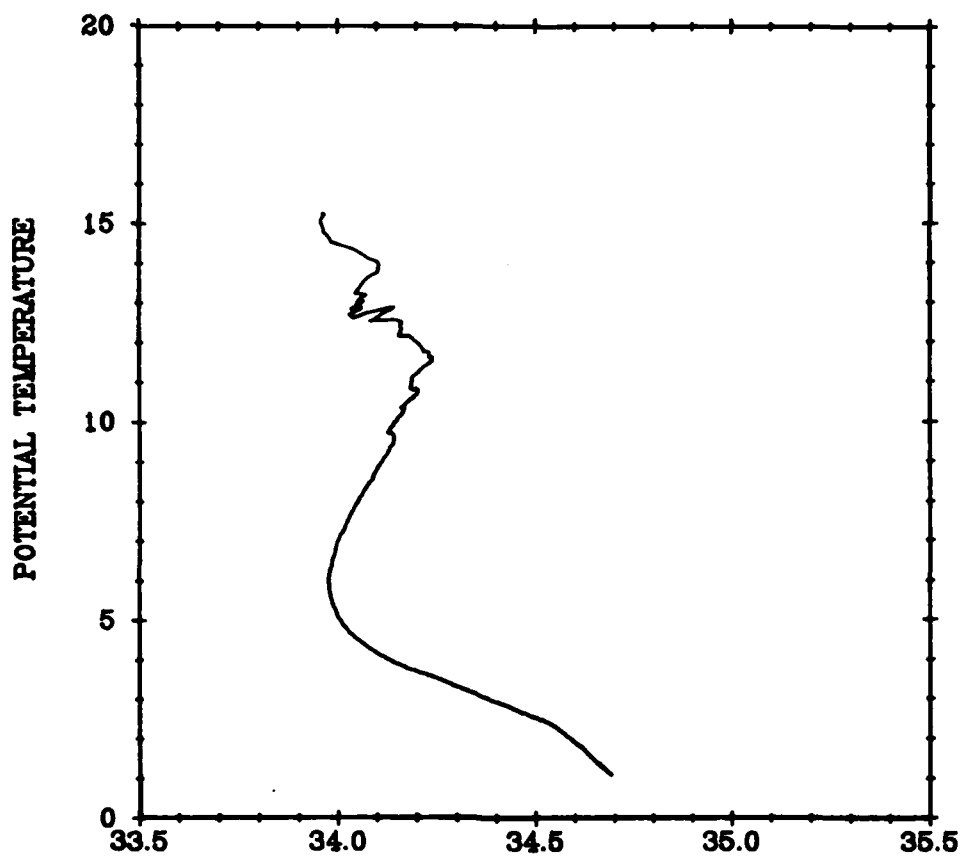


LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB SARGH  
 15 42 5N 151 19 9W 5-17/84 1610 5611 220 14 15.4 15.0 1015.9

STD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C			DEG C				CL TON		M
15	15.253	33.965	15.253	25.119	33.740	41.985	282.409	0.000		0
20	15.183	33.965	15.183	25.135	33.758	42.007	282.491	0.057		19
40	14.469	34.011	14.463	25.326	33.974	42.246	284.341	0.121		39
60	13.352	34.065	13.344	25.600	34.290	42.401	289.102	0.192		59
80	12.953	34.145	12.842	25.685	34.394	42.123	291.719	0.209		79
100	12.720	34.072	12.737	25.733	34.447	42.780	227.771	0.255		99
150	11.966	34.210	11.847	26.005	34.771	43.114	252.333	0.363		149
200	10.960	34.188	10.936	26.173	34.960	43.352	197.993	0.460		198
250	10.293	34.165	10.254	26.257	35.069	43.494	180.917	0.553		248
300	9.730	34.134	9.696	26.327	35.163	43.611	175.357	0.642		298
350	9.031	34.112	8.993	26.424	35.291	43.763	166.429	0.727		347
400	8.349	34.069	8.317	26.497	35.395	43.901	159.367	0.809		397
450	7.542	34.024	7.499	26.581	35.516	44.057	152.195	0.887		447
500	6.569	33.985	6.524	26.683	35.645	44.249	142.209	0.940		496
550	5.254	33.993	5.205	26.853	35.899	44.543	125.817	1.044		545
600	4.399	34.069	4.335	27.011	36.099	44.783	111.755	1.212		594
650	3.918	34.154	3.860	27.128	36.239	44.943	99.869	1.358		643
700	3.607	34.242	3.543	27.229	36.356	45.076	90.577	1.413		692
750	3.315	34.314	3.245	27.315	36.456	45.190	82.660	1.500		741
800	3.105	34.369	3.029	27.378	36.530	45.273	76.961	1.579		790
850	2.954	34.414	2.971	27.429	36.588	45.339	72.484	1.654		839
900	2.784	34.454	2.695	27.477	36.645	45.404	68.195	1.724		888
950	2.648	34.487	2.552	27.515	36.690	45.456	64.770	1.791		937
1000	2.540	34.521	2.438	27.552	36.733	45.504	61.558	1.854		986
1050	2.417	34.545	2.308	27.582	36.770	45.547	58.874	1.914		1035
1100	2.289	34.564	2.173	27.608	36.803	45.587	56.462	1.972		1084
1150	2.159	34.580	2.037	27.632	36.834	45.625	54.206	2.027		1133
1200	2.062	34.592	1.933	27.650	36.858	45.654	52.000	2.081		1182
1250	1.988	34.604	1.852	27.666	36.879	45.679	51.239	2.133		1231
1300	1.939	34.615	1.766	27.681	36.899	45.702	49.962	2.183		1280
1350	1.950	34.623	1.699	27.693	36.913	45.720	48.924	2.233		1329
1400	1.792	34.629	1.633	27.703	36.926	45.737	48.122	2.281		1378
1450	1.744	34.634	1.577	27.711	36.937	45.751	47.497	2.329		1427
1500	1.702	34.640	1.527	27.719	36.948	45.765	46.957	2.376		1476
1550	1.657	34.645	1.474	27.727	36.959	45.779	46.234	2.423		1525
1600	1.623	34.649	1.432	27.734	36.968	45.789	45.810	2.469		1574
1650	1.597	34.653	1.397	27.739	36.975	45.799	45.480	2.514		1623
1700	1.572	34.657	1.363	27.745	36.983	45.808	45.152	2.560		1672
1750	1.549	34.661	1.331	27.750	36.990	45.816	44.841	2.605		1721
1800	1.533	34.664	1.305	27.755	36.996	45.823	44.589	2.649		1770
1850	1.517	34.666	1.280	27.758	37.000	45.829	44.602	2.694		1819
1900	1.504	34.669	1.258	27.762	37.006	45.836	44.478	2.739		1868
1950	1.495	34.672	1.239	27.766	37.010	45.842	44.407	2.783		1917
2000	1.490	34.673	1.224	27.767	37.013	45.845	44.532	2.827		1966
2050	1.479	34.676	1.203	27.771	37.018	45.851	44.422	2.872		2015
2100	1.479	34.677	1.193	27.773	37.020	45.854	44.515	2.916		2064
2150	1.471	34.679	1.176	27.776	37.024	45.858	44.644	2.961		2113
2200	1.474	34.680	1.167	27.777	37.026	45.860	44.848	3.006		2162
2250	1.475	34.681	1.157	27.778	37.028	45.863	45.051	3.051		2211
2300	1.477	34.683	1.148	27.781	37.031	45.866	45.199	3.096		2260
2350	1.482	34.683	1.142	27.781	37.031	45.867	45.535	3.141		2309
2400	1.486	34.684	1.134	27.782	37.033	45.869	45.785	3.187		2358
2450	1.491	34.685	1.128	27.784	37.035	45.871	46.051	3.233		2407
2500	1.499	34.685	1.124	27.784	37.035	45.872	46.438	3.279		2456
2550	1.506	34.686	1.119	27.785	37.036	45.874	46.738	3.326		2505
2600	1.513	34.686	1.114	27.785	37.037	45.875	47.110	3.373		2554
2650	1.519	34.687	1.108	27.787	37.039	45.876	47.395	3.420		2603
2700	1.528	34.687	1.105	27.787	37.039	45.877	47.801	3.467		2652
2750	1.536	34.688	1.100	27.788	37.040	45.878	48.126	3.515		2701
2800	1.545	34.689	1.097	27.788	37.041	45.879	48.536	3.564		2750
2850	1.555	34.689	1.094	27.789	37.042	45.880	48.997	3.612		2799
2900	1.565	34.689	1.091	27.789	37.042	45.881	49.129	3.662		2848
2950	1.577	34.689	1.090	27.789	37.042	45.881	49.800	3.711		2897
3000	1.590	34.690	1.090	27.790	37.043	45.882	50.222	3.761		2946
3050	1.603	34.690	1.089	27.790	37.043	45.882	50.716	3.812		2995
3100	1.616	34.690	1.089	27.790	37.043	45.884	51.213	3.863		3044
3150	1.620	34.690	1.089	27.790	37.043	45.882	51.375	3.880		3093

NISKIN BOTTLE DATA										
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBS IN	DEG C
1	15.316	33.971	5.85	112.9	5.4	1.24	0.0	0.00	15.316	25.110
54	11.577	34.098	6.02	102.2	5.6	0.27	0.0	0.07	11.571	25.579
102	12.671	34.105	5.76	96.0	6.0	0.42	4.2	0.02	12.656	25.768
154	11.452	34.249	5.42	98.5	11.7	0.74	9.9	0.01	11.612	26.075
204	10.809	34.189	5.56	89.1	13.2	0.77	11.0	0.01	10.784	26.183
303	9.680	34.134	5.33	83.3	19.1	1.36	14.6	0.01	9.645	26.335
400	8.452	34.075	4.66	70.8	29.2	1.42	20.2	0.00	8.410	26.486
497	6.670	33.989	3.68	53.6	47.4	1.74	27.7	0.00	6.624	26.673
596	5.222	33.996	2.39	33.6	73.3	2.45	35.4	0.00	5.173	26.859
697	4.443	34.063	1.42	19.6	92.7	2.83	40.4	0.00	4.399	27.000
795	3.942	34.150	0.78	10.6	108.6	3.33	43.4	0.00	3.883	27.122
894	3.454	34.228	0.45	6.1	121.7	3.10	44.7	0.00	3.589	27.213
993	3.419	34.292	0.29	3.9	128.6	3.18	45.3	0.00	3.347	27.288
1241	2.913	34.427	0.23	3.1	149.1	3.21	46.0	0.00	2.826	27.443
1489	2.547	34.523	0.63	8.3	160.1	3.15	45.1	0.00	2.444	27.553
1724	2.205	34.577	1.14	14.9	169.8	3.05	43.7	0.00	2.087	27.626
1960	1.988	34.606	1.52	19.8	174.1	2.96	42.8	0.00	1.853	27.667
2445	1.711	34.640	2.09	27.0	176.8	2.85	41.1	0.00	1.540	27.718
2935	1.556	34.662	2.65	34.0	173.8	2.72	39.5	0.00	1.340	27.750
3420	1.492	34.675	3.06	39.2	168.7	2.63	38.5	0.00	1.229	27.769
3922	1.476	34.683	3.32	42.5	164.4	2.57	37.7	0.00	1.159	27.780
4422	1.500	34.686	3.46	44.2	162.1	2.55	37.4	0.00	1.125	27.784
5019	1.547	34.689	3.59	45.8	155.5		36.9	0.00	1.097	27.789
5620	1.620	34.690	3.63	46.3	153.4	2.50	36.8	0.00	1.089	27.790

# MARATHON 2 STA. 42



R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 43

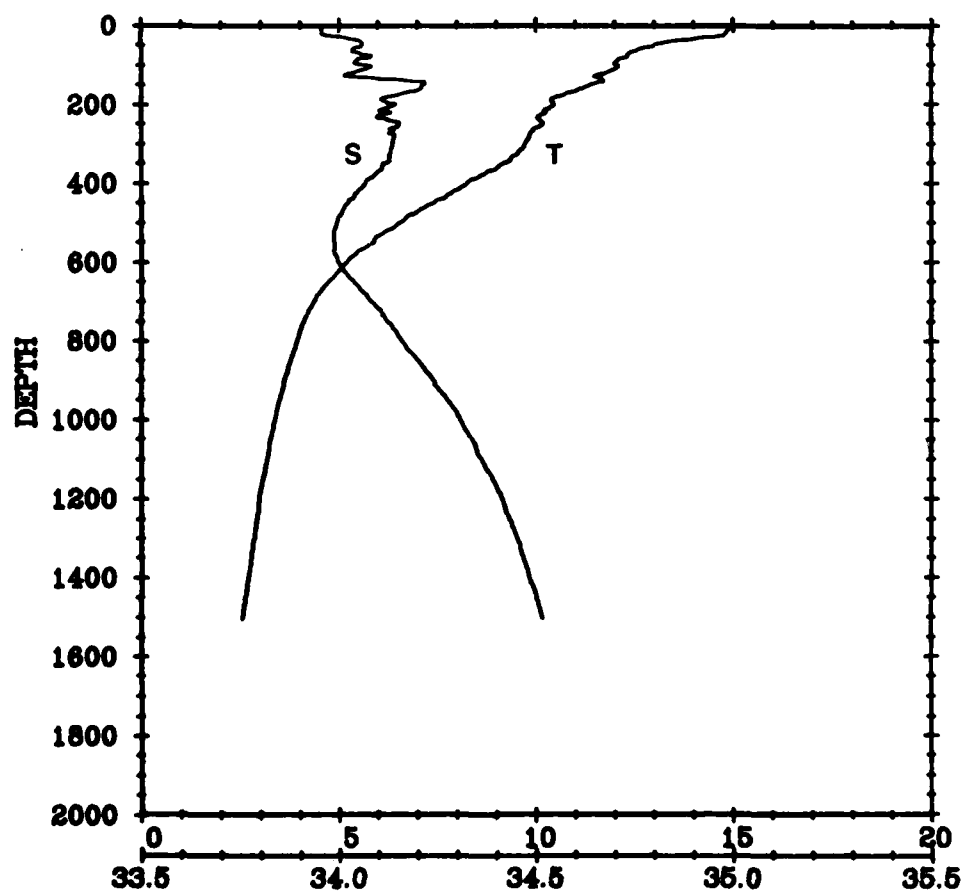
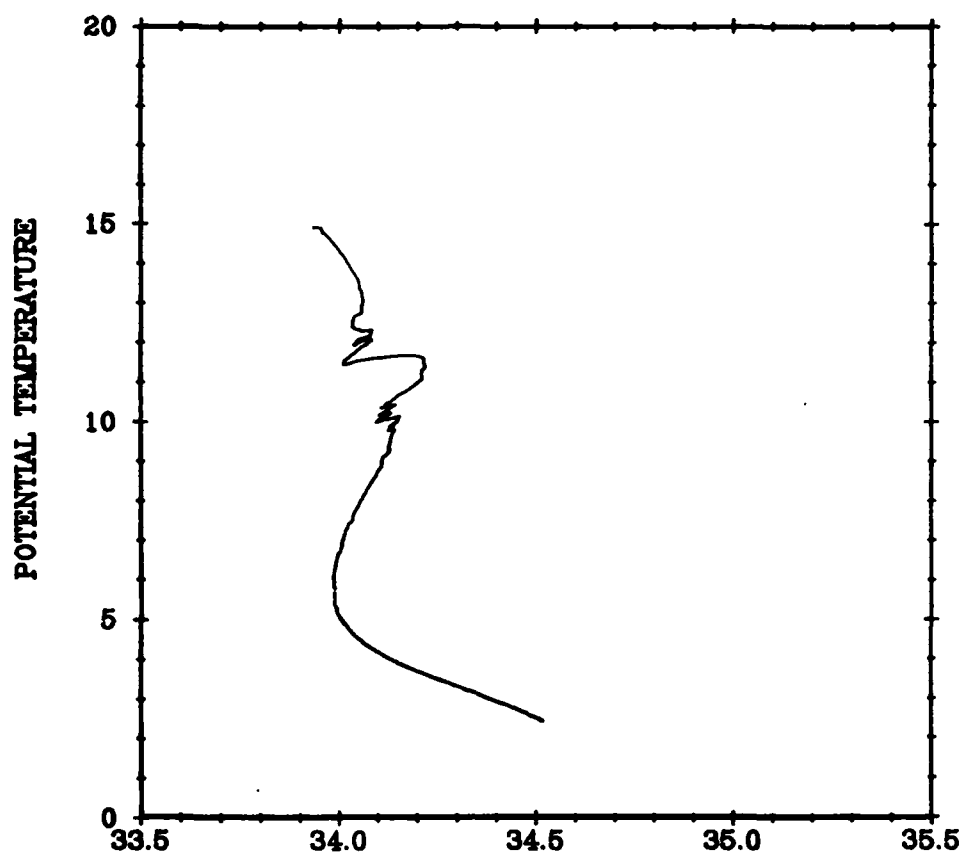
LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
16 3 2N 151 59 8W 5/17/84 2254 5529 210 15 19 4 17 2 1016 3

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	14.898	33.949	14.898	25.195	33.818	42.076	277.200	0.000	0
20	14.709	33.965	14.706	25.219	33.878	42.143	272.679	0.155	19
40	13.545	34.341	13.539	25.542	34.224	42.528	244.357	0.407	39
60	12.655	34.543	12.647	25.722	34.438	42.774	227.719	0.154	59
80	12.228	34.560	12.219	25.818	34.551	42.903	219.041	0.199	79
100	12.028	34.058	12.015	25.855	34.596	42.955	215.036	0.242	99
120	11.410	34.204	11.391	25.095	34.849	43.230	195.312	0.345	149
140	10.401	34.128	10.377	25.207	35.014	43.435	184.599	0.440	198
160	10.113	34.143	10.084	26.259	35.088	43.520	179.703	0.511	248
180	9.725	34.116	9.691	26.329	35.156	43.614	174.827	0.620	298
200	9.192	34.119	9.154	26.404	35.264	43.734	168.435	0.705	347
220	8.269	34.068	8.228	26.508	35.410	43.919	158.834	0.787	397
240	7.413	34.024	7.369	26.599	35.540	44.187	150.334	0.865	446
260	6.582	33.994	6.536	26.639	35.670	44.253	141.718	0.938	496
280	5.198	33.997	5.149	26.851	35.911	44.558	124.829	1.071	595
300	4.355	34.079	4.302	27.022	36.112	44.797	109.627	1.188	694
320	3.921	34.158	3.863	27.130	36.242	44.947	99.606	1.293	793
340	3.608	34.237	3.544	27.225	36.351	45.072	90.960	1.388	892
360	3.360	34.305	3.290	27.304	36.442	45.174	83.834	1.475	991
380	3.167	34.357	3.090	27.364	36.512	45.253	78.478	1.556	1090
400	2.967	34.410	2.884	27.425	36.583	45.334	72.928	1.632	1189
420	2.816	34.449	2.746	27.467	36.633	45.399	69.230	1.703	1287
440	2.697	34.480	2.601	27.505	36.678	45.442	65.849	1.771	1386
460	2.559	34.512	2.456	27.543	36.724	45.494	62.440	1.835	1485
480	2.531	34.518	2.427	27.551	36.732	45.504	61.768	1.846	1503

WISKIN BOTTLE DATA		SALINITY	DIS C2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUSIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C													
3	14.844	33.942	4.53	105.0	5.6	0.20	0.0	0.00	14.844	25.191	33.826	42.086	3	
12	12.622	34.036	6.15	100.7	5.8	0.34	1.5	0.71	12.615	25.722	34.440	42.778	52	
101	12.119	34.084	5.93	96.0	6.4	0.48	5.2	0.02	12.105	25.958	34.595	42.951	101	
115	11.496	34.155	5.62	91.4	9.9	0.67	8.6	0.01	11.479	26.031	34.792	43.170	115	
167	10.789	34.173	5.51	89.3	12.7	0.82	10.9	0.01	10.769	26.173	34.963	43.368	167	
201	10.324	34.125	5.68	90.0	13.6	0.84	11.2	0.01	10.300	26.218	35.028	43.452	201	
252	9.993	34.142	5.53	89.6	15.8	0.91	12.5	0.01	9.964	26.288	35.113	43.550	252	
301	9.584	34.110	5.40	84.2	19.3	1.03	14.5	0.01	9.550	26.348	35.190	43.644	301	
401	8.224	34.066	4.57	69.0	32.0	1.46	21.0	0.00	8.182	26.513	35.417	43.927	401	
501	6.639	33.996	3.62	52.7	49.1	1.96	27.9	0.00	6.593	26.683	35.661	44.242	504	
601	5.218	33.996	2.43	34.2	71.5	2.47	35.3	0.00	5.169	26.860	35.907	44.553	605	
701	4.165	34.076	1.34	19.5	96.0	2.83	40.8	0.00	4.312	27.019	36.108	44.793	706	
800	3.897	34.163	0.74	10.1	112.6	3.02	43.5	0.00	3.838	27.137	36.249	44.956	806	
900	3.587	34.242	0.42	5.7	124.4	3.12	44.8	0.00	3.522	27.231	36.358	45.090	907	
1000	3.344	34.308	0.29	3.9	134.5	3.16	45.4	0.00	3.273	27.307	36.447	45.179	1008	
1252	2.992	34.435	0.25	3.3	152.0	3.19	45.9	0.00	2.895	27.452	36.614	45.368	1263	
1501	2.534	34.518D	0.56	7.4	162.2		45.2	0.00	2.430	27.550	36.731	45.503	1515	



# MARATHON 2 STA. 43



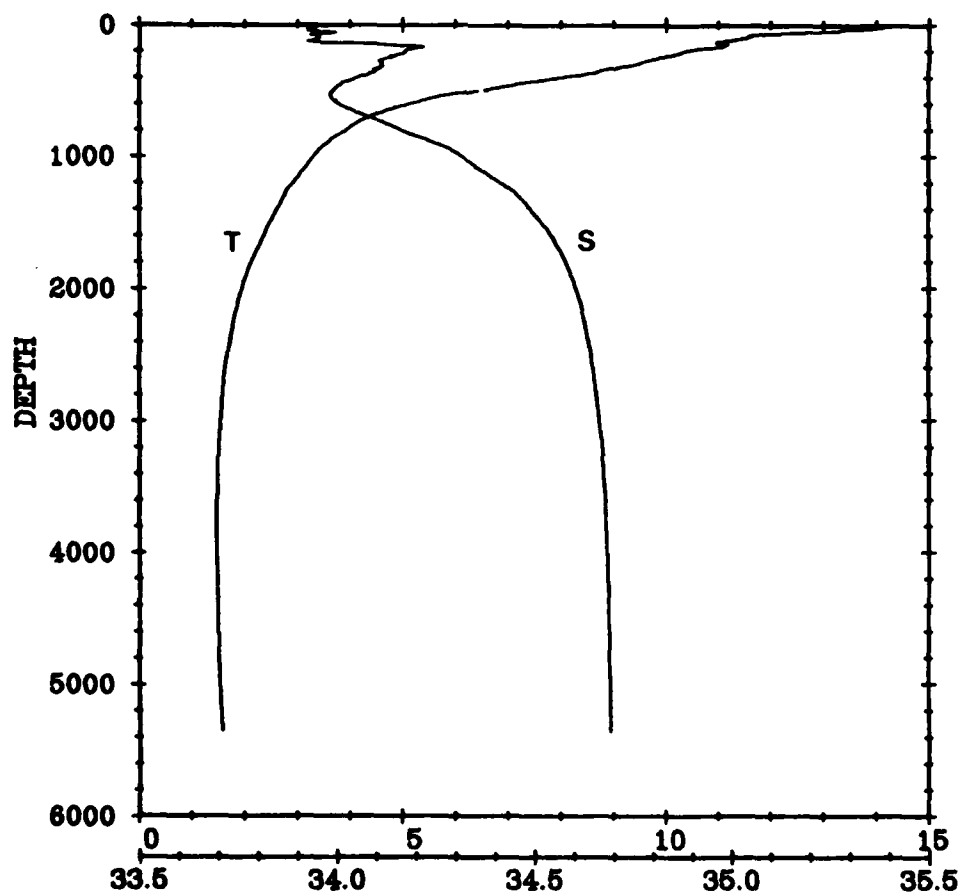
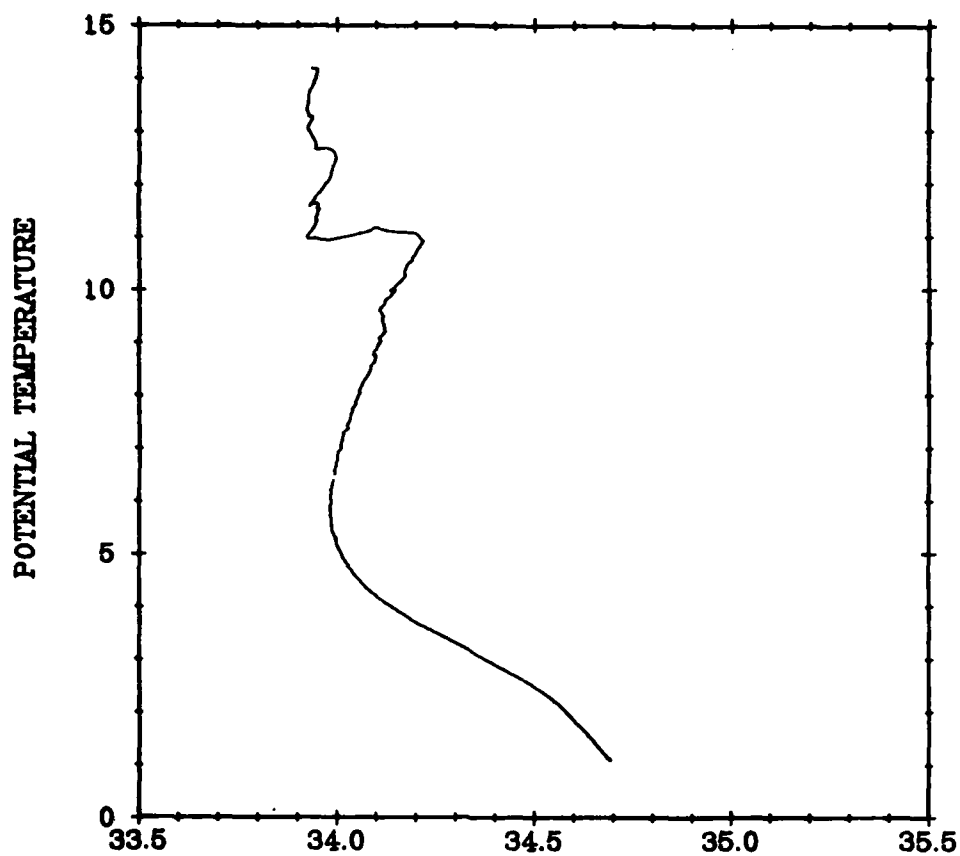
S/V THOMAS WASHINGTON MARATHON LEG II STATION 44

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			JMT	M	DIR	KT	DEG C	DEG C	MB
16 24 9N	151 59 5W	5/19/84	542	5374	210	20	15.6	15.0	1013.9

CTD DATA									
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM/TON		M
0	14.163	33.946	14.163	25.339	33.999	42.283	262.438	0.100	0
20	14.028	33.945	14.025	25.367	34.033	42.321	260.402	0.152	19
40	13.862	33.931	13.856	25.494	34.185	42.436	248.896	0.103	39
60	12.435	33.970	12.427	25.708	34.434	42.779	229.036	0.151	59
80	11.682	33.949	11.672	25.934	34.591	42.964	217.434	0.196	79
100	11.476	33.951	11.464	25.875	34.640	43.021	214.012	0.239	99
150	11.096	34.093	11.078	26.056	34.834	43.228	197.990	0.342	149
200	10.366	34.173	10.342	26.248	35.056	43.477	180.699	0.436	198
250	9.886	34.131	9.857	26.298	35.127	43.568	176.845	0.526	248
300	9.430	34.115	9.397	26.362	35.211	43.671	171.609	0.613	298
350	8.767	34.097	8.730	26.454	35.333	43.820	163.422	0.697	347
400	8.059	34.055	8.017	26.529	35.441	43.959	156.642	0.777	397
450	7.195	34.012	7.152	26.620	35.571	44.127	148.134	0.853	446
500	6.488	33.992	6.443	26.699	35.685	44.272	140.599	0.925	496
600	5.167	34.002	5.118	26.871	35.920	44.568	124.077	1.057	595
700	4.381	34.077	4.328	27.018	36.106	44.791	110.079	1.175	694
800	3.946	34.158	3.887	27.128	36.238	44.942	99.892	1.280	793
900	3.578	34.244	3.514	27.233	36.361	45.093	90.101	1.375	892
1000	3.327	34.311	3.257	27.311	36.452	45.185	83.018	1.461	991
1100	3.133	34.359	3.057	27.368	36.519	45.261	77.945	1.542	1090
1200	2.928	34.410	2.845	27.428	36.589	45.341	72.486	1.617	1189
1300	2.751	34.456	2.662	27.481	36.651	45.412	67.572	1.687	1287
1400	2.634	34.487	2.539	27.516	36.693	45.459	64.610	1.753	1386
1500	2.531	34.515	2.439	27.551	36.734	45.507	61.549	1.816	1485
1600	2.375	34.540	2.267	27.582	36.771	45.551	58.753	1.876	1583
1700	2.262	34.559	2.147	27.607	36.803	45.588	56.511	1.934	1682
1800	2.141	34.577	2.019	27.631	36.834	45.626	54.213	1.999	1780
1900	2.019	34.590	1.910	27.650	36.859	45.656	52.471	2.043	1879
2000	1.952	34.602	1.816	27.667	36.881	45.683	50.948	2.094	1977
2100	1.877	34.612	1.734	27.682	36.900	45.706	49.689	2.145	2076
2200	1.822	34.621	1.671	27.693	36.915	45.724	48.722	2.194	2174
2300	1.774	34.627	1.616	27.702	36.927	45.739	48.041	2.242	2272
2400	1.727	34.634	1.561	27.712	36.940	45.754	47.280	2.290	2371
2500	1.682	34.641	1.508	27.722	36.952	45.769	46.526	2.337	2469
2600	1.645	34.646	1.462	27.729	36.962	45.781	46.004	2.383	2567
2700	1.609	34.651	1.418	27.736	36.971	45.793	45.479	2.429	2665
2800	1.587	34.654	1.387	27.741	36.977	45.801	45.273	2.474	2763
2900	1.569	34.658	1.360	27.746	36.984	45.809	45.039	2.519	2861
3000	1.546	34.662	1.328	27.751	36.991	45.818	44.727	2.564	2959
3100	1.527	34.665	1.300	27.756	36.997	45.825	44.533	2.609	3057
3200	1.507	34.668	1.271	27.760	37.003	45.833	44.316	2.653	3155
3300	1.494	34.671	1.248	27.764	37.008	45.839	44.191	2.697	3253
3400	1.489	34.673	1.233	27.767	37.012	45.843	44.248	2.742	3351
3500	1.483	34.675	1.217	27.770	37.016	45.848	44.286	2.786	3448
3600	1.476	34.677	1.200	27.772	37.019	45.852	44.306	2.830	3546
3700	1.473	34.679	1.187	27.775	37.022	45.856	44.332	2.875	3644
3800	1.468	34.681	1.171	27.777	37.026	45.860	44.425	2.919	3741
3900	1.471	34.681	1.164	27.778	37.027	45.862	44.731	2.954	3839
4000	1.473	34.682	1.155	27.779	37.029	45.864	44.949	3.008	3936
4100	1.474	34.684	1.145	27.782	37.032	45.868	45.080	3.053	4034
4200	1.478	34.684	1.138	27.782	37.032	45.869	45.400	3.099	4131
4300	1.485	34.685	1.133	27.783	37.034	45.870	45.698	3.144	4229
4400	1.491	34.686	1.128	27.784	37.035	45.872	45.981	3.190	4326
4500	1.496	34.687	1.121	27.786	37.037	45.874	46.247	3.236	4423
4600	1.502	34.687	1.115	27.786	37.038	45.875	46.601	3.283	4521
4700	1.509	34.688	1.110	27.787	37.039	45.877	46.902	3.329	4618
4800	1.516	34.688	1.105	27.788	37.040	45.878	47.274	3.376	4715
4900	1.524	34.689	1.101	27.789	37.041	45.879	47.594	3.424	4812
5000	1.531	34.690	1.096	27.790	37.042	45.881	47.898	3.472	4909
5100	1.541	34.690	1.093	27.790	37.043	45.881	48.326	3.520	5006
5200	1.550	34.690	1.089	27.790	37.043	45.882	48.738	3.563	5103
5300	1.562	34.691	1.088	27.791	37.044	45.883	49.136	3.617	5200
5400	1.575	34.691	1.098	27.791	37.044	45.883	49.625	3.667	5297
5452	1.582	34.691	1.088	27.791	37.044	45.883	49.884	3.692	5348

WISKIN BOTTLE DATA									
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN
1	13.593	33.890	6.27	106.3	5.5	0.31	2.8	0.33	13.543
31	12.593	34.012	6.23	103.6	6.2	0.33	1.7	0.20	12.586
102	11.837	34.037	5.96	97.5	6.9	0.34	5.0	0.12	11.824
147	10.795	33.985	5.91	94.3	8.1	0.66	7.7	0.02	10.777
194	10.476	34.176	5.59	88.9	14.0	0.87	11.7	0.01	10.453
286	9.544	34.118	5.39	83.8	19.4	1.06	14.6	0.00	9.512
391	7.812	34.019	4.37	65.4	35.9	1.60	22.6	0.01	7.773
489	6.576	33.991	3.63	52.8	50.6	1.99	28.0	0.01	6.531
594	5.236	33.999	2.44	34.4	75.0	2.52	35.3	0.00	5.188
694	4.413	34.071	1.44	19.9	95.2	2.85	40.3	0.01	4.361
799	3.875	34.170	0.75	10.2	113.4	3.05	43.5	0.00	3.917
896	3.595	34.239	0.43	5.8	125.0	3.13	44.6	0.00	3.531
988	3.347	34.305	0.28	3.8	115.2	3.23	45.4	0.00	3.277
1224	2.975	34.416	0.23	3.1	154.4	3.25	45.9	0.00	2.920
1439	2.594	34.497	0.45	5.9	161.1	3.21	45.5	0.00	2.483
1699	2.253	34.561	0.95	12.4	168.1	3.11	44.3	0.00	2.136
1919	2.005	34.596	1.31	17.1	176.0	3.02	43.0	0.00	1.972
2457	1.704	34.638	2.07	26.7	177.7	2.86	41.2	0.00	1.530
2969	1.541	34.663	2.73	35.1	170.1	2.72	39.4	0.00	1.322
3505	1.483	34.676	3.12	40.0	166.1	2.63	38.2	0.00	1.211
3959	1.477	34.682	3.33	42.6	166.5	2.58	37.7	0.00	1.156
4395	1.495	34.687D	3.37	43.1	160.1	2.58	37.4	0.00	1.123
4821	1.524	34.689					37.0	0.00	1.100
5342	1.582	34.690	3.62	46.2	156.7	2.51	36.7	0.00	1.089

MARATHON 2 STA. 44



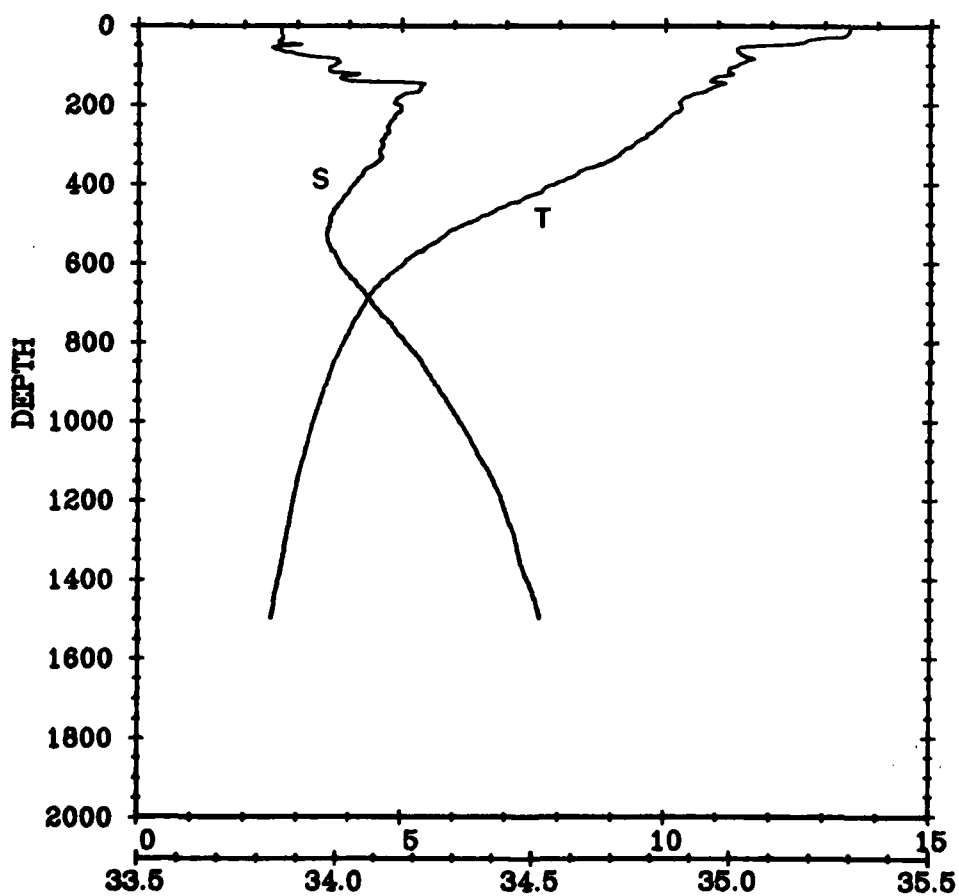
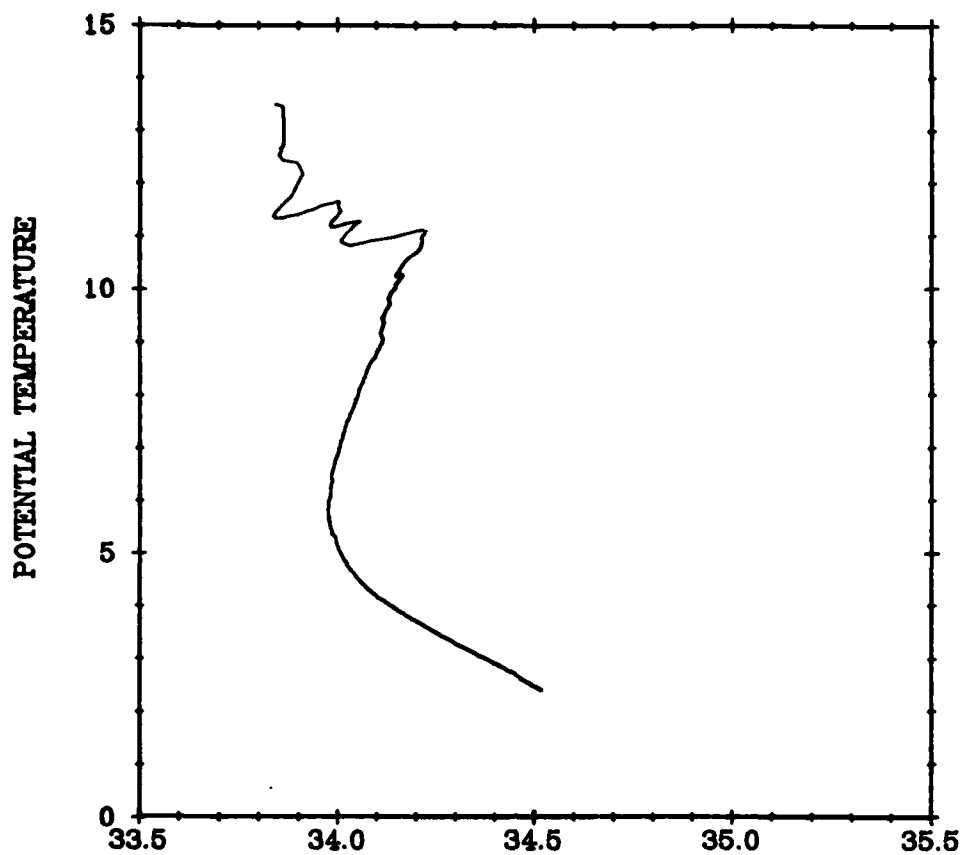
R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 45

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
16 46 2N	151 59 9W	5/18/84	1600	5528	210	26	15.6	15.6	1011.9

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
1	13.474	33.856	13.474	25.412	34.099	42.408	255.573	0.000	0
20	13.480	33.861	13.377	25.436	34.126	42.438	253.892	0.051	19
40	12.412	33.851	12.613	25.587	34.308	42.647	239.957	0.110	39
60	11.500	33.851	11.493	25.800	34.555	42.946	220.186	0.146	59
80	11.536	33.952	11.526	25.864	34.627	43.035	214.351	0.130	79
100	11.371	33.993	11.359	25.927	34.695	43.080	209.068	0.212	99
150	10.977	34.181	10.959	26.146	34.928	43.125	199.439	0.312	149
200	10.277	34.155	10.254	26.249	35.061	43.486	180.529	0.424	198
250	9.322	34.135	9.893	26.295	35.122	43.562	177.141	0.514	248
300	9.414	34.116	9.381	26.345	35.215	43.675	171.279	0.601	298
350	8.804	34.098	8.767	26.449	35.325	43.812	163.921	0.685	347
400	7.942	34.046	7.902	26.539	35.456	43.979	155.593	0.764	397
450	7.122	34.006	7.079	26.625	35.580	44.139	147.355	0.840	446
500	6.272	33.981	6.229	26.719	35.714	44.312	138.538	0.912	496
550	5.354	34.005	5.306	26.896	35.941	44.594	122.474	1.042	595
600	4.309	34.086	4.255	27.033	36.125	44.812	109.561	1.158	694
650	3.889	34.171	3.831	27.144	36.257	44.964	99.275	1.261	793
700	3.577	34.246	3.513	27.235	36.363	45.085	89.942	1.355	892
750	3.318	34.309	3.248	27.311	36.452	45.185	83.065	1.442	991
800	3.116	34.365	3.040	27.375	36.525	45.269	77.109	1.522	1090
850	2.929	34.417	2.846	27.433	36.594	45.346	71.980	1.597	1189
900	2.788	34.453	2.699	27.475	36.643	45.402	68.114	1.667	1287
950	2.657	34.480	2.561	27.509	36.684	45.449	65.189	1.734	1386
1000	2.517	34.515	2.415	27.549	36.732	45.504	61.734	1.797	1485
1050	2.501	34.518	2.398	27.553	36.736	45.510	61.190	1.805	1497

NISKIN BOTTLE DATA		DIS O2 ML/L	O2 SAT	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C												
1	13.432	33.855	5.29	106.4	5.6	0.28	0.7	0.02	13.432	25.420	34.109	42.418	1
51	11.384	33.873	6.31	102.6	4.4	0.46	3.2	0.17	11.578	25.793	34.554	42.932	51
97	11.266	33.947	6.09	98.4	7.0	0.53	5.2	0.23	11.254	25.926	34.698	43.088	97
125	11.184	34.082	5.77	93.2	9.1	0.66	8.0	0.01	11.169	26.031	34.805	43.196	125
159	10.577	34.177	5.59	89.0	14.2	0.38	11.6	0.01	10.558	26.213	35.012	43.425	159
197	10.153	34.141	5.62	88.7	15.2	0.99	12.2	0.01	10.130	26.259	35.076	43.577	197
243	9.710	34.105	5.63	88.0	16.8	0.95	12.9	0.01	9.682	26.307	35.144	43.692	244
291	9.322	34.110	5.25	81.3	21.7	1.11	15.7	0.01	9.290	26.375	35.229	43.693	292
399	7.552	34.026	4.27	63.5	38.0	1.44	23.6	0.01	7.513	26.580	35.514	44.355	401
491	6.160	33.974	3.31	47.5	57.4	2.14	32.4	0.05	6.007	26.741	35.748	44.355	496
593	5.144	34.105	2.30	32.2	77.2	2.54	36.1	0.00	4.996	26.887	35.943	44.596	597
675	4.408	34.066	1.45	20.0	94.0	2.90	40.3	0.00	4.356	27.006	36.093	44.776	680
749	4.087	34.127	1.06	14.5	125.0	2.94	42.1	0.00	4.031	27.088	36.191	44.889	753
861	3.459	34.224	0.50	6.8	123.3	3.10	44.3	0.00	3.597	27.209	36.333	45.051	870
961	3.406	34.286	0.32	4.3	132.7	3.14	45.1	0.00	3.337	27.284	36.420	45.150	971
1086	2.961	34.436	0.25	2.3	150.7	3.18	45.8	0.00	2.878	27.422	36.581	45.331	1196
1490	2.505	34.519	0.59	7.9	163.8		45.1	0.00	2.403	27.553	36.736	45.509	1504

# MARATHON 2 STA. 45



LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
17 6.5N	151 58.8W	5/19/84	2224	519	25	17	15.6	15.3	1015.6

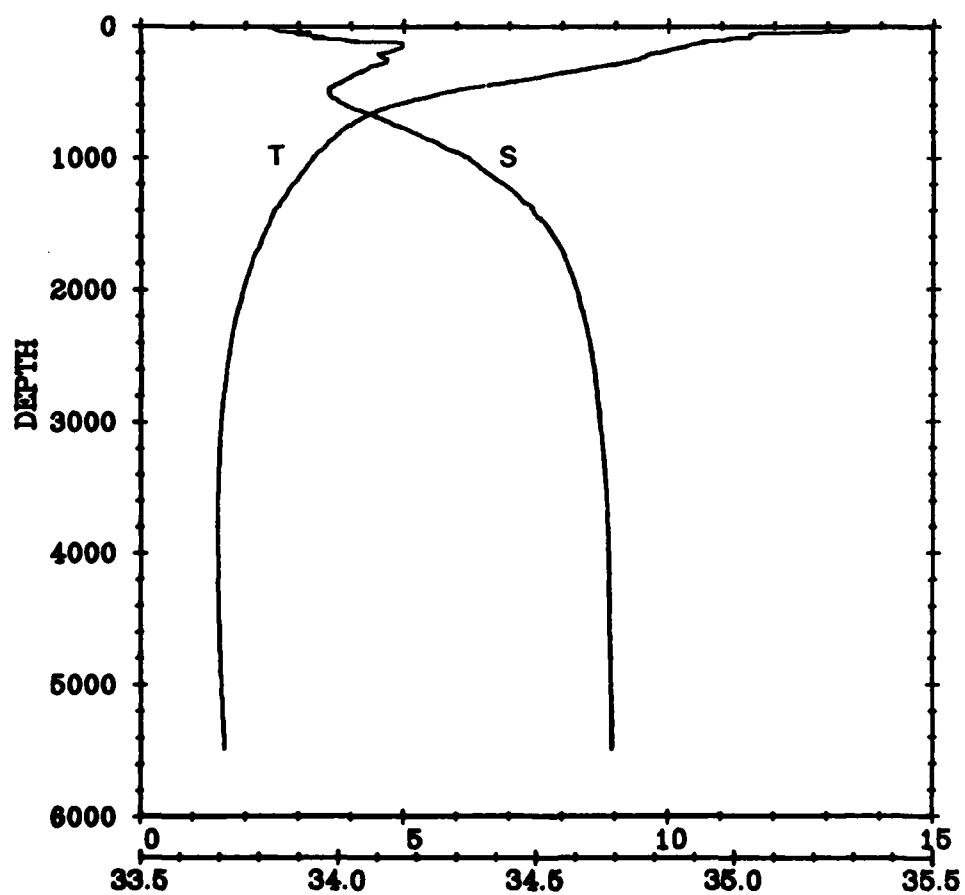
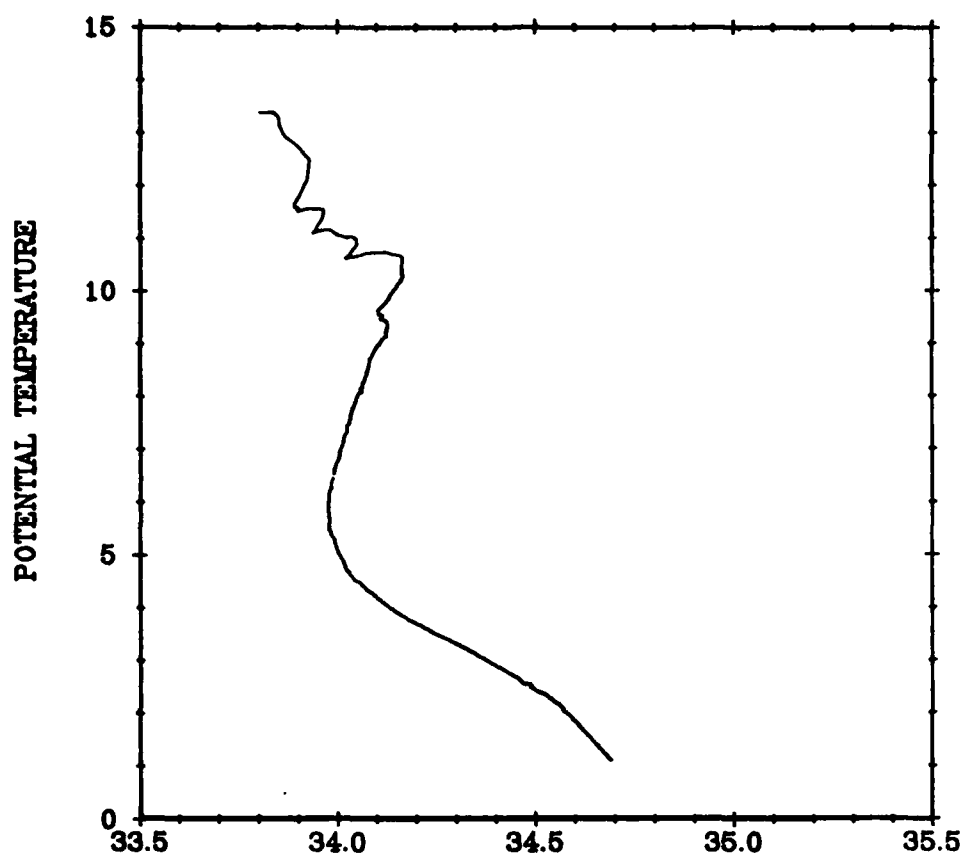
## CTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CLUSTON		M
0	13.398	33.935	13.398	25.411	34.102	42.413	250.652	0.000	0
20	13.387	33.936	13.384	25.415	34.106	42.418	255.965	0.051	19
40	13.040	33.954	13.035	25.507	34.211	42.535	247.660	0.102	39
60	11.740	33.904	11.732	25.789	34.543	42.915	221.260	0.148	59
80	11.514	33.948	11.504	25.867	34.629	43.008	214.458	0.192	79
100	11.111	33.991	11.099	25.972	34.752	43.146	204.687	0.234	99
150	10.342	34.163	10.324	26.243	35.052	43.475	179.991	0.330	149
200	9.914	34.121	9.791	26.301	35.133	43.577	175.421	0.419	198
250	9.439	34.121	9.411	26.364	35.212	43.672	170.358	0.505	248
300	8.936	34.389	8.904	26.435	35.312	43.796	164.196	0.589	298
350	8.101	34.054	8.065	26.521	35.420	43.947	156.529	0.669	347
400	7.451	34.024	7.412	26.593	35.532	44.077	150.115	0.746	397
450	5.639	33.990	5.598	26.677	35.656	44.236	142.106	0.819	446
500	5.844	33.975	5.801	26.768	35.784	44.401	133.425	0.888	496
600	4.850	34.015	4.803	26.917	35.983	44.646	119.200	1.014	595
700	4.206	34.103	4.154	27.057	36.154	44.846	106.120	1.127	694
800	3.828	34.183	3.750	27.162	36.278	44.989	96.465	1.228	793
900	3.526	34.255	3.462	27.247	36.378	45.101	88.699	1.321	892
1000	3.273	34.324	3.203	27.327	36.470	45.205	81.448	1.406	991
1100	3.095	34.367	3.019	27.378	36.530	45.274	76.925	1.485	1090
1200	2.903	34.414	2.822	27.433	36.595	45.349	71.908	1.559	1189
1300	2.738	34.454	2.649	27.480	36.651	45.412	67.673	1.629	1287
1400	2.551	34.490	2.456	27.525	36.705	45.477	63.442	1.695	1386
1500	2.457	34.520	2.356	27.558	36.744	45.519	60.674	1.757	1485
1600	2.332	34.542	2.224	27.587	36.779	45.561	58.106	1.816	1583
1700	2.235	34.563	2.120	27.612	36.810	45.596	55.901	1.873	1682
1800	2.119	34.577	1.998	27.633	36.837	45.630	53.953	1.928	1780
1900	2.044	34.589	1.915	27.649	36.857	45.654	52.604	1.981	1879
2000	1.960	34.601	1.824	27.665	36.879	45.681	51.118	2.033	1977
2100	1.901	34.609	1.758	27.677	36.894	45.699	50.202	2.084	2076
2200	1.831	34.617	1.680	27.689	36.911	45.719	49.125	2.133	2174
2300	1.774	34.625	1.616	27.701	36.925	45.738	48.113	2.182	2272
2400	1.724	34.633	1.558	27.712	36.939	45.754	47.314	2.230	2370
2500	1.689	34.638	1.515	27.719	36.949	45.766	46.834	2.277	2469
2600	1.649	34.644	1.465	27.727	36.959	45.779	46.201	2.323	2567
2700	1.623	34.648	1.432	27.733	36.967	45.788	45.882	2.369	2665
2800	1.594	34.653	1.394	27.739	36.976	45.799	45.439	2.415	2761
2900	1.571	34.657	1.362	27.745	36.983	45.808	45.138	2.460	2861
3000	1.549	34.660	1.331	27.749	36.989	45.816	44.913	2.505	2959
3100	1.527	34.664	1.300	27.755	36.996	45.824	44.605	2.550	3057
3200	1.515	34.667	1.279	27.759	37.002	45.831	44.502	2.595	3155
3300	1.501	34.670	1.255	27.763	37.007	45.837	44.363	2.639	3252
3400	1.492	34.673	1.236	27.766	37.011	45.843	44.292	2.683	3350
3500	1.492	34.675	1.216	27.770	37.016	45.848	44.271	2.728	3448
3600	1.476	34.677	1.200	27.772	37.019	45.852	44.306	2.772	3546
3700	1.471	34.679	1.185	27.775	37.023	45.857	44.351	2.816	3643
3800	1.469	34.680	1.172	27.777	37.025	45.859	44.511	2.861	3741
3900	1.469	34.682	1.162	27.779	37.028	45.863	44.629	2.905	3838
4000	1.472	34.683	1.154	27.780	37.030	45.865	44.863	2.950	3936
4100	1.477	34.684	1.148	27.781	37.031	45.867	45.129	2.995	4033
4200	1.482	34.684	1.142	27.782	37.032	45.868	45.465	3.040	4131
4300	1.488	34.685	1.136	27.783	37.034	45.870	45.747	3.086	4228
4400	1.494	34.685	1.131	27.783	37.034	45.871	46.101	3.132	4326
4500	1.499	34.686	1.124	27.785	37.036	45.873	46.368	3.178	4423
4600	1.508	34.687	1.121	27.786	37.037	45.874	46.753	3.225	4520
4700	1.516	34.687	1.117	27.786	37.038	45.875	47.092	3.272	4617
4800	1.523	34.688	1.112	27.787	37.039	45.876	47.395	3.319	4715
4900	1.530	34.688	1.107	27.787	37.040	45.877	47.769	3.366	4812
5000	1.539	34.689	1.103	27.789	37.041	45.879	48.110	3.414	4909
5100	1.548	34.689	1.100	27.789	37.041	45.880	48.521	3.463	5006
5200	1.559	34.689	1.098	27.789	37.042	45.880	48.970	3.511	5103
5300	1.569	34.690	1.095	27.790	37.043	45.881	49.333	3.561	5200
5400	1.581	34.690	1.094	27.790	37.043	45.881	49.805	3.610	5297
5500	1.594	34.690	1.094	27.790	37.043	45.881	50.297	3.660	5394
5600	1.607	34.690	1.094	27.790	37.043	45.881	50.792	3.711	5491
5642	1.613	34.690	1.094	27.790	37.043	45.881	51.011	3.732	5531

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	13.492	33.955	6.32	107.0	4.4	0.24	0.2	0.01	13.492	25.407	34.094	42.402		1
53	11.710	33.915	6.28	102.4	4.8	0.45	3.1	0.20	11.703	25.932	34.558	42.931		53
103	11.224	33.967	5.95	96.1	5.5	0.58	6.3	0.22	11.211	25.933	34.708	43.299		103
153	10.414	34.164	5.60	88.9	14.2	0.97	11.7	0.21	10.396	26.231	35.037	43.457		153
203	9.843	34.124	5.51	89.0	15.7	0.89	12.7	0.21	9.920	26.299	35.129	43.572		204
253	8.910	34.093	4.97	76.3	25.3	1.27	18.0	0.01	8.877	26.427	35.239	43.781		254
303	7.354	34.319	4.09	60.6	40.4	1.73	34.5	0.20	7.315	26.522	35.546	44.095		305
353	5.693	33.976	2.97	42.3	66.0	2.28	32.3	0.00	5.650	26.787	35.811	44.435		356
403	4.931	34.016	2.05	28.6	81.4	2.59	37.2	0.00	4.783	26.920	35.986	44.649		407
453	4.256	34.093	1.27	17.5	99.8	2.87	41.1	0.00	4.203	27.044	36.138	44.828		458
503	3.802	34.184	0.65	9.8	115.2	3.04	43.7	0.00	3.744	27.163	36.280	44.991		509
553	3.500	34.261	0.36	4.9	126.2	3.11	44.9	0.00	3.436	27.254	36.386	45.111		560
1003	1.260	34.327	0.23	3.1	135.8	3.19	45.4	0.00	3.189	27.330	36.474	45.210		1011
1251	2.799	34.435	0.23	3.1	154.6	3.20	45.8	0.00	2.713	27.460	36.627	45.385		1262
1496	2.464	34.519	0.56	7.4	164.8	3.13	45.2	0.00	2.361	27.557	36.742	45.517		1511
1748	2.181	34.568	0.98	12.8	171.1	3.05	43.9	0.00	2.061	27.621	36.821	45.511		1766
1997	1.948	34.603	1.39	18.1	174.2	2.96	43.1	0.00	1.811	27.668	36.882	45.584		2019
2498	1.691	34.639	2.08	26.8	174.8	2.84	41.1	0.00	1.515	27.719	36.949	45.766		2519
3027	1.536	34.664	2.76	35.4	170.4	2.69	39.2	0.00	1.312	27.754	36.995	45.822		3069
3511	1.479	34.676	3.13	40.1	164.9	2.60	38.1	0.00	1.207	27.771	37.017	45.850		3564
4054	1.477	34.684	3.35	42.8	165.3	2.54	37.5	0.00	1.145	27.781	37.031	45.867		4120
4546	1.510	34.687	3.44	44.0	160.7	2.53	37.2	0.00	1.120	27.786	37.037	45.874		4626
5041	1.553	34.689	3.55	45.3	156.1		36.8	0.01	1.100	27.789	37.041	45.879		5135
5530	1.614	34.690	3.59	45.8	155.3	2.48	36.8	0.01	1.095	27.790	37.042	45.881		5640

# MARATHON 2 STA. 46



LATITUDE	LONGITUDE	MO/DY YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BARCH
17 27' N	152 0' W	5.19-94	436	3563	350	10	12.8	11.1	1020

## STD DATA

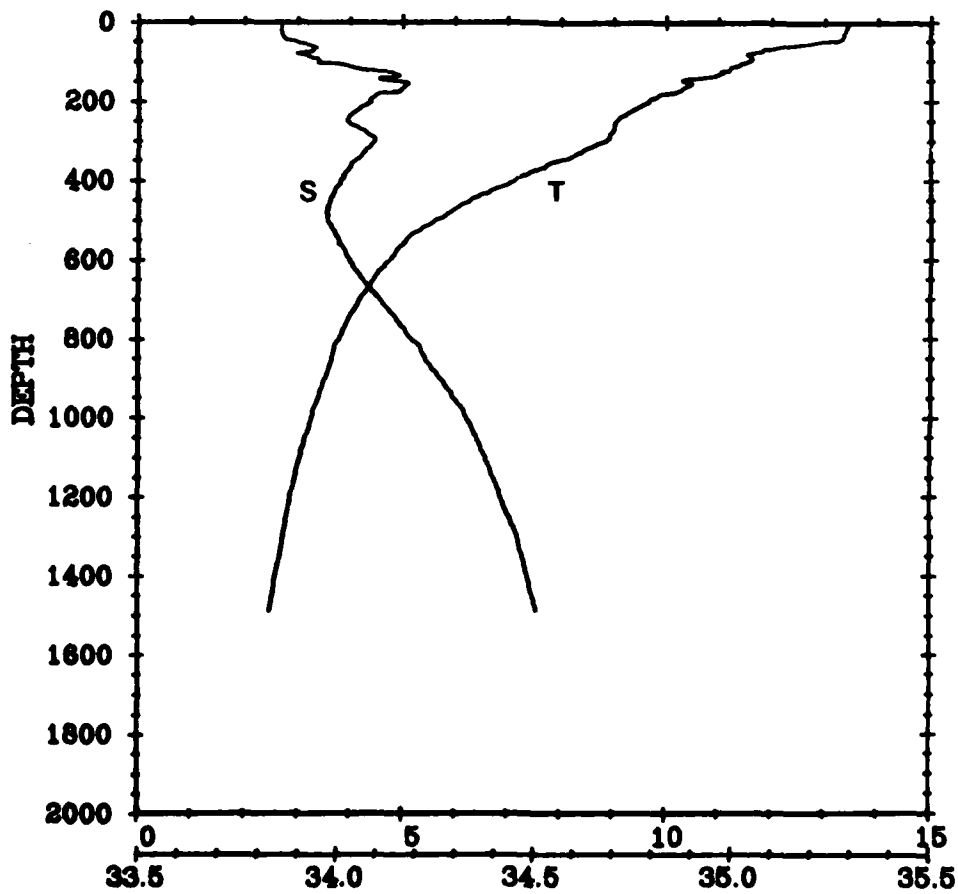
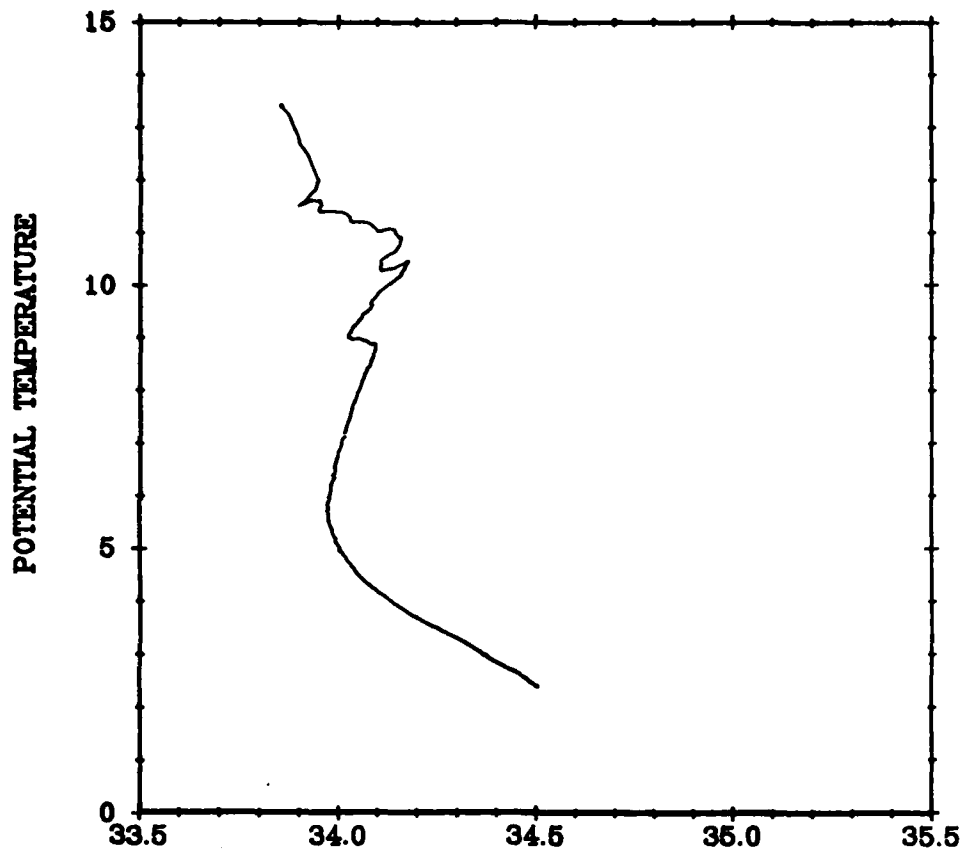
PRESS DB	TEMP DEG C	SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
0	13.418	33.855	13.418	25.423	34.112	42.427	214.565	0.000	0
20	13.387	33.858	13.384	25.432	34.122	42.434	254.247	0.251	19
40	13.258	33.869	13.253	25.467	34.162	42.479	251.454	0.101	39
60	12.314	33.925	12.325	25.593	34.423	42.773	230.460	0.150	59
80	11.664	33.932	11.654	25.817	34.575	42.949	229.032	0.195	79
100	11.506	33.961	11.494	25.877	34.641	43.021	221.804	0.238	99
150	10.437	34.143	10.419	26.211	35.016	43.435	193.055	0.337	149
200	9.662	34.083	9.640	26.297	35.136	43.587	175.776	0.427	198
250	9.064	34.027	9.037	26.351	35.217	43.693	171.401	0.514	248
300	8.832	34.090	8.800	26.438	35.313	43.798	164.051	0.597	298
350	8.014	34.049	7.979	26.530	35.443	43.963	155.616	0.677	347
400	7.110	34.010	7.092	26.626	35.581	44.140	146.639	0.753	397
450	6.299	33.982	6.259	26.715	35.710	44.306	139.173	0.824	446
500	5.657	33.974	5.615	26.790	35.815	44.441	131.130	0.891	496
600	4.757	34.027	4.710	26.937	36.006	44.673	117.276	1.016	595
700	4.193	34.105	4.141	27.060	36.157	44.850	105.822	1.127	694
800	3.794	34.184	3.736	27.164	36.281	44.993	96.233	1.228	793
900	3.522	34.255	3.458	27.248	36.378	45.102	88.654	1.321	892
1000	3.257	34.323	3.187	27.328	36.471	45.208	81.343	1.406	991
1100	3.045	34.370	2.969	27.385	36.540	45.285	76.142	1.484	1090
1200	2.866	34.411	2.784	27.434	36.599	45.354	71.114	1.558	1189
1300	2.724	34.452	2.636	27.480	36.651	45.414	67.662	1.628	1287
1400	2.597	34.480	2.502	27.514	36.692	45.460	64.701	1.694	1386
1500	2.475	34.504	2.373	27.544	36.729	45.504	62.059	1.758	1485
1604	2.469	34.506	2.367	27.546	36.731	45.506	61.863	1.760	1489

## NISKIN BOTTLE DATA

DEPTH M	TEMP DEG C	SALINITY	DIS O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
1	13.412	33.857	6.41	108.4	4.9	0.22	0.0	0.00	13.412	25.425	34.115	42.426	1	
53	12.969	33.887	6.30	105.5	5.1	0.30	0.9	0.03	12.962	25.539	34.245	42.572	53	
103	11.240	33.888	5.91	95.5	7.2	0.59	6.4	0.01	11.227	25.947	34.721	43.111	103	
136	10.525	34.110	5.66	90.1	13.1	0.83	10.9	0.01	10.509	26.170	34.971	43.397	136	
170	10.328	34.119	5.66	89.1	15.1	0.92	12.1	0.00	10.308	26.262	35.085	43.520	171	
203	9.652	34.092	5.67	88.5	17.2	0.96	12.9	0.00	9.629	26.305	35.145	43.595	204	
252	9.000	34.030	5.65	86.9	19.3	1.04	14.1	0.00	8.973	26.363	35.232	43.710	253	
322	8.748	34.091	4.85	74.2	27.3	1.33	18.9	0.00	8.716	26.451	35.331	43.819	303	
400	7.272	34.017	4.06	60.0	41.0	1.76	25.0	0.00	7.233	26.612	35.560	44.112	402	
500	5.635	33.976	2.97	42.2	54.4	2.30	32.5	0.00	5.593	26.794	35.820	44.447	503	
602	4.771	34.026	1.96	27.3	84.6	2.67	37.9	0.00	4.724	26.914	36.003	44.669	606	
700	4.233	34.038	1.28	17.6	100.7	2.89	41.1	0.00	4.180	27.050	36.146	44.837	705	
799	3.805	34.180	0.57	9.1	115.5	3.08	43.9	0.00	3.747	27.159	36.276	44.987	805	
897	3.529	34.252	0.37	5.0	127.4	3.17	45.0	0.00	3.465	27.244	36.375	45.098	904	
995	3.283	34.318	0.24	3.2	136.5	3.20	45.6	0.00	3.213	27.321	36.463	45.199	1003	
1239	2.800	34.430	0.23	3.1	156.8	3.22	46.0	0.00	2.715	27.456	36.623	45.381	1250	
1487	2.472	34.507	0.46	6.1	165.5		45.6	0.00	2.370	27.547	36.731	45.506	1501	



# MARATHON 2 STA. 47



R/V THOMAS WASHINGTON MARATHON LEG II STATION 43

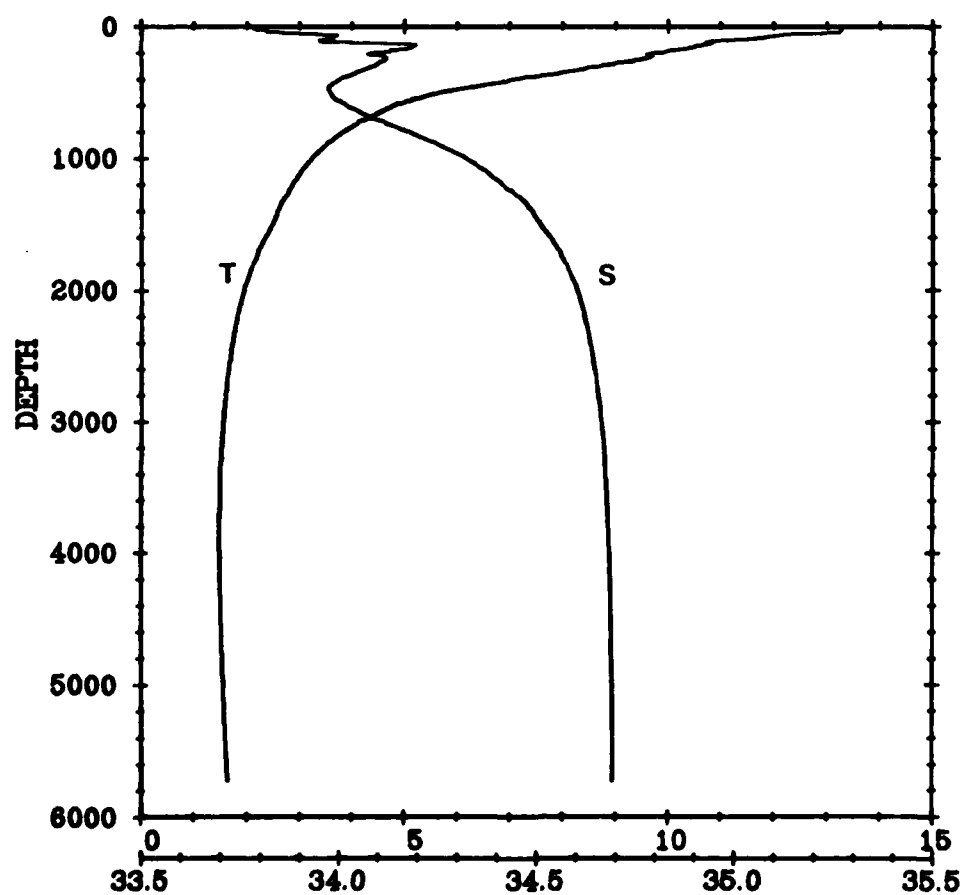
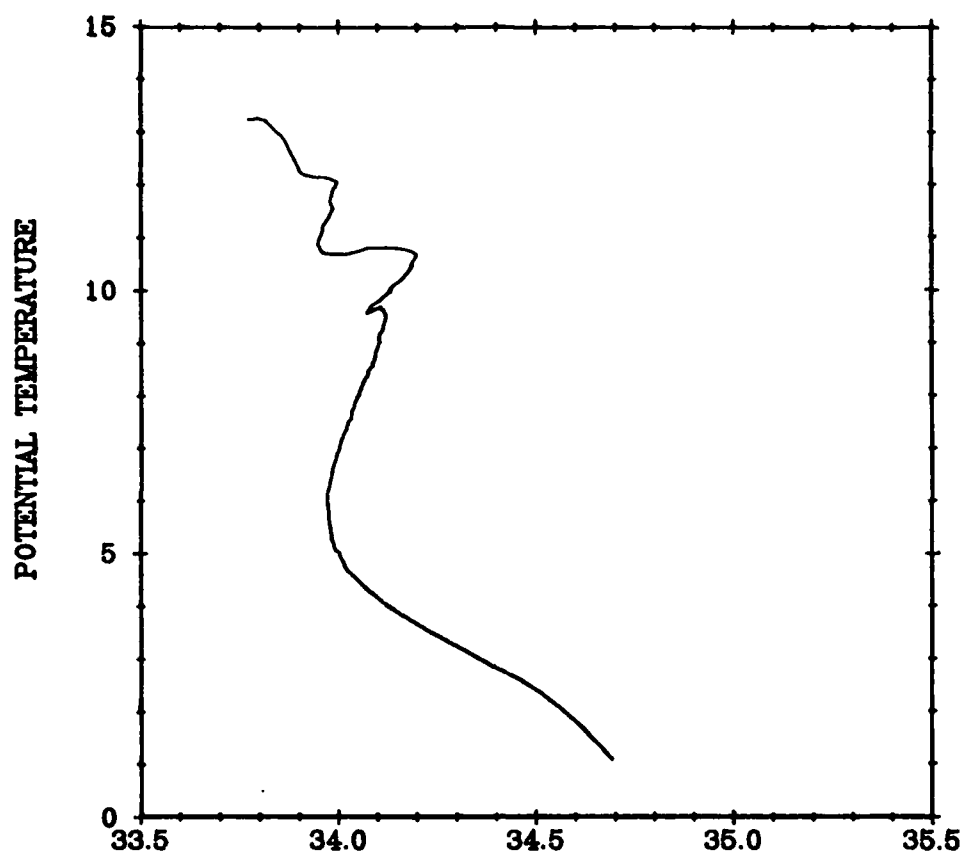
LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB SARCH  
 17 49 N 152 04 W 5/19/84 1016 5896 360 7 12.8 10.0 1025.7

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	13.247	33.780	13.247	25.399	34.096	42.414	256.803	0.000	0
20	13.251	33.788	13.248	25.405	34.102	42.419	256.794	0.051	19
40	13.193	33.819	13.178	25.443	34.142	42.462	253.695	0.102	39
60	12.139	33.924	12.331	25.691	34.421	42.771	230.625	0.151	59
80	11.941	33.986	11.831	25.834	34.584	42.951	217.474	0.196	79
100	11.747	33.971	11.335	25.914	34.694	43.070	210.270	0.238	99
120	10.546	34.198	10.528	26.227	35.027	43.441	191.564	0.334	149
200	9.910	34.152	9.797	26.287	35.120	43.564	176.761	0.426	198
250	9.491	34.119	9.453	26.355	35.202	43.660	171.177	0.513	248
300	8.736	34.092	8.724	26.454	35.334	43.823	162.426	0.596	298
350	8.016	34.049	7.991	26.530	35.443	43.963	155.645	0.676	347
400	7.164	34.036	7.126	26.619	35.572	44.129	147.409	0.752	397
450	6.479	33.980	6.439	26.691	35.676	44.264	140.703	0.824	446
500	5.725	33.976	5.693	26.793	35.805	44.428	131.829	0.892	496
600	4.826	34.016	4.779	26.920	35.987	44.651	118.914	1.017	596
700	4.323	34.082	4.270	27.028	36.119	44.806	109.132	1.131	694
800	3.857	34.170	3.799	27.146	36.261	44.969	97.955	1.235	793
900	3.514	34.249	3.450	27.244	36.375	45.099	89.010	1.328	892
1000	3.243	34.316	3.174	27.323	36.468	45.205	81.705	1.414	991
1100	3.038	34.366	2.962	27.392	36.538	45.285	76.161	1.493	1090
1200	2.865	34.410	2.793	27.434	36.598	45.351	71.777	1.567	1189
1300	2.731	34.451	2.642	27.479	36.650	45.411	67.815	1.636	1289
1400	2.587	34.484	2.492	27.518	36.697	45.466	64.294	1.702	1385
1500	2.487	34.506	2.385	27.545	36.729	45.503	62.050	1.766	1485
1600	2.357	34.530	2.249	27.575	36.765	45.547	59.278	1.824	1583
1700	2.228	34.552	2.123	27.604	36.802	45.589	56.627	1.884	1682
1800	2.112	34.569	2.010	27.626	36.829	45.622	54.693	1.940	1780
1900	2.009	34.586	1.901	27.648	36.857	45.655	52.644	1.994	1879
2000	1.941	34.600	1.826	27.666	36.881	45.683	50.962	2.045	1977
2100	1.879	34.610	1.735	27.680	36.898	45.704	49.847	2.096	2075
2200	1.819	34.618	1.658	27.691	36.913	45.722	48.891	2.145	2174
2300	1.764	34.626	1.606	27.702	36.927	45.740	47.989	2.194	2272
2400	1.721	34.632	1.555	27.711	36.939	45.754	47.148	2.241	2370
2500	1.680	34.639	1.506	27.720	36.950	45.768	46.645	2.288	2469
2600	1.643	34.644	1.466	27.727	36.959	45.779	46.201	2.335	2567
2700	1.620	34.649	1.429	27.734	36.968	45.790	45.770	2.381	2665
2800	1.592	34.654	1.392	27.740	36.977	45.800	45.340	2.426	2763
2900	1.563	34.659	1.356	27.746	36.984	45.810	44.984	2.471	2861
3000	1.550	34.661	1.312	27.750	36.990	45.816	44.855	2.516	2959
3100	1.531	34.665	1.314	27.755	36.997	45.824	44.589	2.561	3057
3200	1.513	34.668	1.277	27.760	37.003	45.832	44.401	2.606	3155
3300	1.504	34.670	1.238	27.763	37.006	45.836	44.407	2.650	3252
3400	1.491	34.673	1.235	27.767	37.012	45.843	44.277	2.694	3350
3500	1.484	34.675	1.218	27.770	37.015	45.848	44.301	2.739	3448
3600	1.479	34.677	1.232	27.772	37.019	45.852	44.336	2.783	3546
3700	1.477	34.678	1.191	27.774	37.021	45.855	44.514	2.827	3643
3800	1.472	34.680	1.175	27.776	37.025	45.859	44.557	2.872	3741
3900	1.473	34.682	1.156	27.779	37.027	45.862	44.691	2.916	3838
4000	1.474	34.683	1.156	27.780	37.030	45.865	44.894	2.961	3936
4100	1.477	34.684	1.148	27.781	37.031	45.867	45.129	3.006	4033
4200	1.481	34.684	1.141	27.782	37.032	45.868	45.449	3.052	4131
4300	1.486	34.686	1.134	27.784	37.035	45.871	45.644	3.097	4228
4400	1.492	34.686	1.129	27.784	37.035	45.872	45.998	3.143	4326
4500	1.499	34.687	1.124	27.785	37.037	45.873	46.298	3.189	4423
4600	1.506	34.687	1.119	27.786	37.037	45.875	46.669	3.236	4520
4700	1.514	34.688	1.115	27.787	37.038	45.876	46.988	3.282	4617
4800	1.522	34.688	1.111	27.787	37.039	45.877	47.378	3.330	4715
4900	1.529	34.689	1.126	27.788	37.040	45.878	47.682	3.377	4812
5000	1.539	34.689	1.132	27.789	37.041	45.879	48.092	3.425	4909
5100	1.547	34.690	1.099	27.790	37.042	45.880	48.434	3.473	5006
5200	1.557	34.690	1.096	27.790	37.042	45.881	48.865	3.522	5103
5300	1.567	34.690	1.093	27.790	37.043	45.881	49.297	3.571	5200
5400	1.576	34.691	1.089	27.791	37.044	45.883	49.643	3.620	5297
5500	1.588	34.691	1.088	27.791	37.044	45.883	50.116	3.670	5394
5600	1.600	34.691	1.087	27.791	37.044	45.883	50.591	3.721	5491
5700	1.613	34.691	1.096	27.791	37.044	45.883	51.088	3.772	5587
5800	1.627	34.691	1.087	27.791	37.044	45.883	51.605	3.823	5684
5844	1.633	34.691	1.087	27.791	37.044	45.883	51.931	3.846	5727

## NISKIN BOTTLE DATA

DEPTH M	TEMP DEG C	SALINITY	DIST O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
1	13.295	33.835	6.27	105.7	4.2	0.28	0.4	0.01	13.295	25.412	34.126	42.442	1	
53	12.313	33.984	6.23	102.1	5.2	0.40	2.7	0.14	12.006	25.799	34.542	42.902	53	
103	10.946	33.974	5.96	95.7	6.9	0.60	6.9	0.01	10.913	25.399	34.775	43.176	103	
153	10.547	34.193	5.62	89.5	14.2	0.96	11.8	0.01	10.529	26.231	35.031	43.445	153	
204	10.032	34.152	5.60	88.2	15.9	0.92	12.6	0.01	10.018	26.299	35.111	43.546	205	
307	9.775	34.091	4.96	74.4	27.0	1.32	18.8	0.01	9.743	26.447	35.325	43.813	304	
401	9.110	34.007	3.96	58.3	42.9	1.90	25.4	0.01	7.072	26.627	35.582	44.142	405	
503	5.662	33.979	2.96	42.1	55.2	2.29	32.4	0.00	5.619	26.793	35.818	44.443	506	
603	4.659	34.036	1.85	25.7	87.7	2.71	38.4	0.00	4.612	26.954	36.029	44.700	607	
703	4.145	34.111	1.10	15.1	102.2	2.92	41.8	0.00	4.093	27.069	36.169	44.865	708	
803	3.763	34.191	0.64	8.7	117.2	3.35	43.8	0.00	3.705	27.172	36.291	45.004	809	
903	3.446	34.266	0.37	5.0	130.1	3.13	44.9	0.00	3.392	27.263	36.399	45.126	910	
1202	3.196	34.330	0.25	3.4	140.9	3.20	45.5	0.00	3.126	27.339	36.486	45.225	1010	
1252	2.785	34.437	0.25	3.3	154.8	3.21	45.8	0.00	2.699	27.462	36.631	45.390	1263	
1502	2.448	34.515	0.53	7.0	164.1	3.15	45.3	0.00	2.345	27.555	36.741	45.517	1517	
1753	2.168	34.566	0.94	12.3	171.4	3.08	44.2	0.00	2.048	27.620	36.822	45.612	1771	
2203	1.942	34.602	1.18	17.9	178.1	3.00	43.1	0.00	1.804	27.668	36.882	45.685	2225	
2503	1.691	34.640	2.12	27.3	175.6	2.94	41.1	0.00	1.503	27.721	36.951	45.769	2534	
3002	1.546	34.663	2.75	35.3	169.5	2.71	39.3	0.00	1.324	27.752	36.992	45.819	3043	
3501	1.486	34.676	3.14	40.2	166.5	2.62	38.3	0.00	1.214	27.770	37.016	45.849	3553	
4001	1.478	34.683	3.34	42.7	164.5	2.57	37.4	0.00	1.152	27.780	37.030	45.865	4066	
4500	1.505	34.687	3.47	44.3	159.1	2.56	37.2	0.00	1.120	27.786	37.037	45.874	4578	
5098	1.557	34.690	3.56	45.5	153.2		36.8	0.00	1.097	27.790	37.042	45.880	5194	
5726	1.633	34.691	3.63	46.3	152.2	2.50	36.6	0.00	1.087	27.791	37.044	45.883	5842	

# MARATHON 2 STA. 48



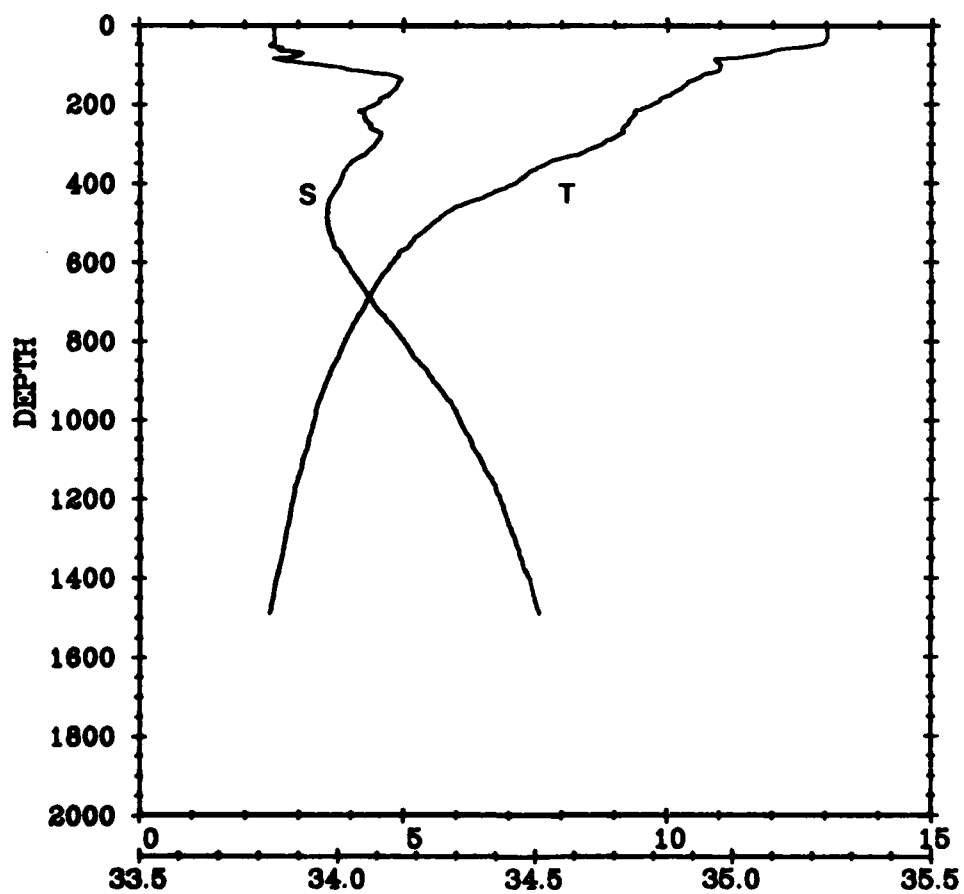
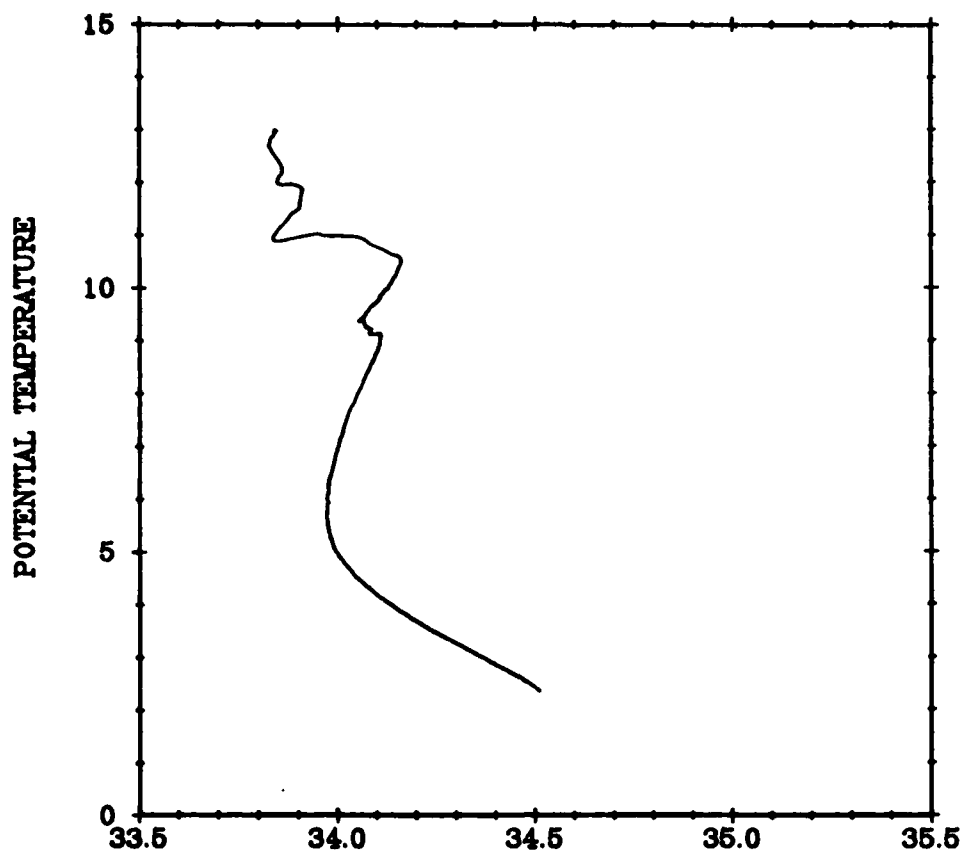
R/V THOMAS WASHINGTON MARATHON LEG II: STATION 49

LATITUDE	LONGITUDE	MO/DY/YR	START TIME GMT	BOTTOM M	WIND DIR	SPEED KT	AIR TEMP DEG C	WET BULB DEG C	SAROM MB
18 8 3N	151 59 2W	5/19/94	1642	4934	42	3	13.3	10.0	1027.4

CTD DATA	SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH M
DB								
0	33.938	13.942	25.495	34.203	42.525	247.595	0.000	0
20	33.941	13.941	25.494	34.199	42.525	248.314	0.050	19
40	33.939	12.955	25.503	34.210	42.538	247.994	0.094	39
60	33.953	12.277	25.646	34.380	42.732	234.966	0.148	59
80	33.979	11.400	25.831	34.594	42.984	217.721	0.193	79
100	33.939	10.978	25.954	34.739	43.119	206.441	0.235	99
150	34.153	10.346	26.232	35.142	43.461	181.077	0.332	149
200	34.096	9.722	26.293	35.128	43.576	176.152	0.421	198
250	34.078	9.222	26.361	35.218	43.686	170.526	0.508	248
300	34.097	8.761	26.449	35.326	43.813	162.912	0.591	298
350	34.034	7.738	26.554	35.478	44.028	153.213	0.670	347
400	34.204	7.104	26.622	35.574	44.132	147.251	0.746	397
450	33.976	6.229	26.715	35.710	44.328	138.225	0.817	446
500	33.973	5.555	26.796	35.824	44.453	130.452	0.884	496
600	34.017	4.768	26.922	35.989	44.654	118.779	1.009	595
700	34.084	4.263	27.030	36.122	44.809	108.802	1.122	694
800	34.164	3.839	27.138	36.250	44.957	98.887	1.225	793
900	34.239	3.492	27.232	36.361	45.083	90.225	1.321	892
1000	34.305	3.234	27.309	36.451	45.185	83.224	1.408	991
1100	34.357	3.023	27.370	36.522	45.266	77.711	1.488	1090
1200	34.407	2.821	27.428	36.590	45.343	72.449	1.563	1188
1300	34.443	2.675	27.469	36.639	45.399	68.790	1.634	1287
1400	34.479	2.520	27.512	36.689	45.457	64.932	1.701	1386
1500	34.509	2.372	27.548	36.733	45.507	61.680	1.764	1485
1506	34.512	2.356	27.552	36.737	45.513	61.305	1.768	1490

NISKIN BOTTLE DATA	SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M						
1	33.935	13.044	25.486	34.197	42.516	1
52	33.987	12.153	25.696	34.434	42.790	52
101	34.037	10.965	26.032	34.816	43.215	101
134	34.158	10.463	26.215	35.018	43.435	134
167	34.136	10.109	26.259	35.077	43.509	168
221	34.284	9.617	26.301	35.141	43.593	222
250	34.380	9.332	26.345	35.197	43.660	251
299	34.109	8.975	26.425	35.292	43.769	300
398	34.011	7.236	26.607	35.555	44.107	400
530	33.972	5.724	26.775	35.795	44.415	503
599	34.220	4.743	26.927	35.995	44.661	603
598	34.095	4.195	27.046	36.141	44.811	703
798	34.167	3.820	27.142	36.255	44.962	804
896	34.245	3.466	27.219	36.369	45.093	903
995	34.308	3.224	27.312	36.454	45.189	1003
1217	34.428	2.743	27.451	36.617	45.374	1248
1486	34.512	2.363	27.551	36.736	45.511	1500

# MARATHON 2 STA. 49

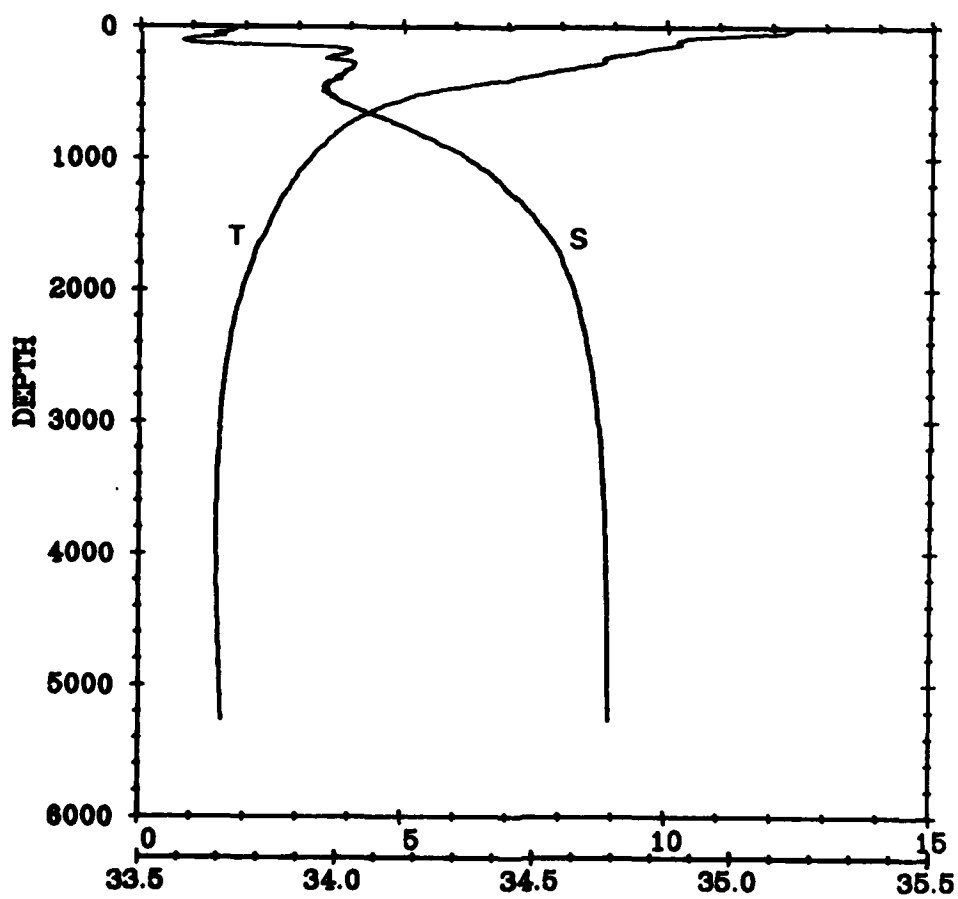
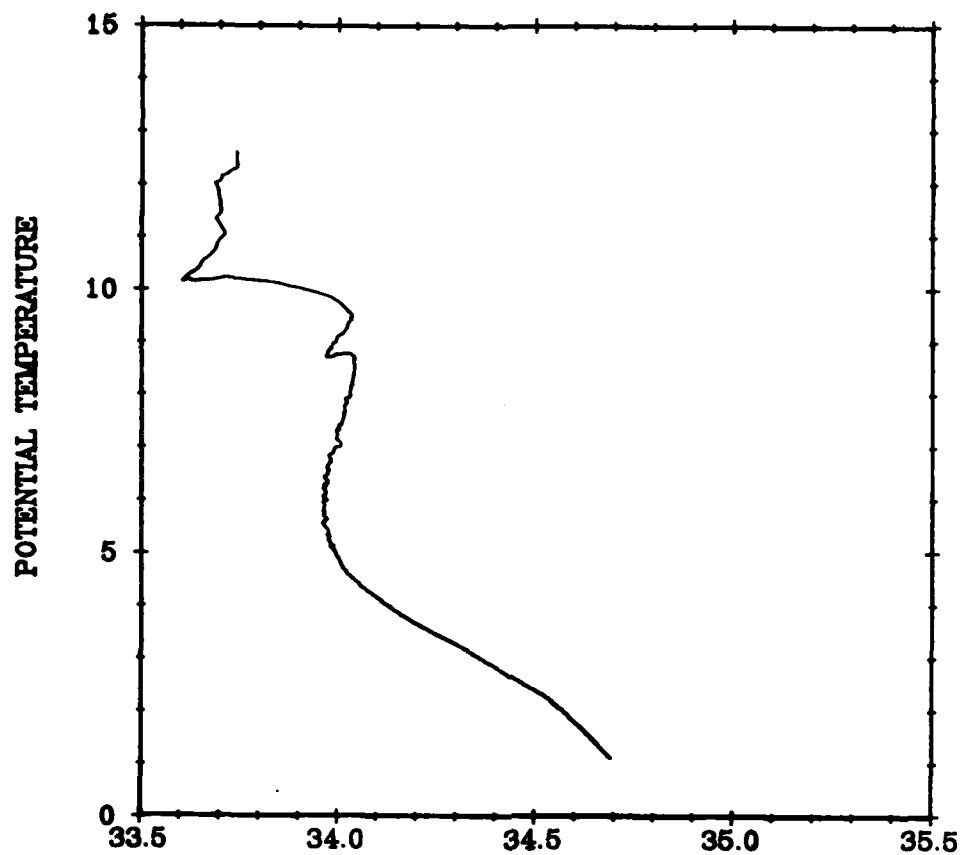


LATITUDE	LONGITUDE	MO/DY-YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
19 30 3N	152 0 3W	5-19/84	2224	M	DIR	KT	DEG C	DEG C	MB
19 30 3N	152 0 3W	5-19/84	2224	5255	180	4	15.5	11.1	1009.1

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	12.526	33.742	12.526	25.512	34.237	42.592	245.165	1.000	0
20	12.333	33.741	12.330	25.549	34.282	42.634	243.263	1.049	19
40	12.202	33.720	12.197	25.559	34.297	42.654	242.689	1.097	39
60	11.614	33.696	11.606	25.650	34.413	42.792	234.373	1.245	59
80	10.756	33.671	10.697	25.795	34.595	43.010	220.995	1.391	79
100	10.265	33.618	10.253	25.830	34.650	43.081	207.995	1.439	99
120	9.365	33.561	9.348	26.035	34.980	43.317	197.747	1.539	119
140	8.370	34.024	8.348	26.298	35.151	43.614	175.489	1.632	139
160	7.381	33.982	7.357	26.359	35.239	43.727	170.199	1.678	159
180	6.468	34.038	6.437	26.453	35.345	43.846	162.148	1.672	179
200	5.741	34.015	5.708	26.543	35.469	44.001	154.199	1.691	199
220	5.099	33.995	5.061	26.619	35.575	44.135	147.121	1.706	219
240	4.500	33.964	4.450	26.704	35.699	44.296	139.247	1.828	239
260	3.946	33.968	3.904	26.798	35.829	44.460	130.143	1.895	259
280	3.447	34.024	3.401	26.946	36.022	44.694	116.207	1.918	279
300	2.999	34.111	2.956	27.071	36.172	44.868	104.432	1.929	299
320	2.543	34.130	2.506	27.174	36.293	45.007	95.213	1.929	319
340	2.087	34.256	2.042	27.252	36.384	45.110	88.189	1.920	339
360	1.631	34.323	1.586	27.310	36.475	45.212	81.097	1.905	359
380	1.175	34.373	1.130	27.390	36.546	45.294	75.594	1.881	379
400	0.719	34.412	0.674	27.437	36.601	45.357	71.461	1.857	399
420	0.263	34.448	0.218	27.479	36.652	45.416	67.564	1.824	419
440	0.107	34.479	0.062	27.516	36.695	45.465	64.469	1.692	439
460	0.051	34.508	0.006	27.549	36.735	45.510	61.346	1.705	459
480	0.005	34.533	0.000	27.579	36.771	45.552	58.995	1.816	479
500	0.000	34.556	0.000	27.609	36.809	45.598	55.994	1.873	499
520	0.000	34.569	0.000	27.626	36.830	45.623	54.610	1.928	519
540	0.000	34.583	0.000	27.645	36.854	45.651	52.935	1.982	539
560	0.000	34.597	0.000	27.664	36.879	45.681	51.157	2.034	559
580	0.000	34.606	0.000	27.676	36.894	45.700	50.212	2.085	579
600	0.000	34.616	0.000	27.689	36.911	45.720	49.086	2.135	599
620	0.000	34.621	0.000	27.699	36.924	45.735	48.344	2.183	619
640	0.000	34.631	0.000	27.710	36.937	45.752	47.472	2.231	639
660	0.000	34.636	0.000	27.717	36.946	45.763	47.044	2.279	659
680	0.000	34.641	0.000	27.726	36.959	45.778	46.126	2.325	679
700	0.000	34.648	0.000	27.733	36.967	45.789	45.356	2.371	699
720	0.000	34.653	0.000	27.739	36.976	45.799	44.439	2.417	719
740	0.000	34.657	0.000	27.745	36.983	45.808	43.511	2.462	739
760	0.000	34.661	0.000	27.750	36.990	45.817	44.827	2.507	759
780	0.000	34.664	0.000	27.755	36.996	45.824	44.461	2.552	779
800	0.000	34.667	0.000	27.759	37.001	45.830	44.537	2.596	799
820	0.000	34.669	0.000	27.762	37.005	45.836	44.464	2.641	819
840	0.000	34.672	0.000	27.766	37.011	45.842	44.334	2.685	839
860	0.000	34.674	0.000	27.769	37.015	45.847	44.257	2.730	859
880	0.000	34.676	0.000	27.771	37.018	45.851	44.422	2.774	879
900	0.000	34.678	0.000	27.774	37.022	45.855	44.463	2.819	899
920	0.000	34.679	0.000	27.775	37.024	45.858	44.459	2.863	919
940	0.000	34.681	0.000	27.779	37.027	45.861	44.762	2.908	939
960	0.000	34.682	0.000	27.779	37.029	45.864	44.965	2.953	959
980	0.000	34.683	0.000	27.781	37.031	45.866	45.183	2.998	979
1000	0.000	34.684	0.000	27.782	37.032	45.868	45.481	3.043	999
1020	0.000	34.684	0.000	27.782	37.033	45.869	45.813	3.089	1019
1040	0.000	34.685	0.000	27.783	37.034	45.871	46.117	3.135	1039
1060	0.000	34.686	0.000	27.784	37.035	45.872	46.418	3.181	1059
1080	0.000	34.686	0.000	27.785	37.036	45.873	46.806	3.228	1079
1100	0.000	34.687	0.000	27.786	37.037	45.874	47.143	3.275	1099
1120	0.000	34.688	0.000	27.787	37.038	45.876	47.482	3.322	1119
1140	0.000	34.688	0.000	27.787	37.039	45.876	47.874	3.370	1139
1160	0.000	34.688	0.000	27.787	37.039	45.877	48.296	3.419	1159
1180	0.000	34.689	0.000	27.788	37.040	45.879	48.629	3.466	1179
1200	0.000	34.689	0.000	27.789	37.041	45.879	49.106	3.515	1199
1220	0.000	34.689	0.000	27.789	37.041	45.880	49.476	3.564	1219
1240	0.000	34.689	0.000	27.789	37.041	45.880	49.812	3.598	1239

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	12.610	33.745	6.34	105.3	3.0	0.35	1.4	0.04	12.610	25.498	34.220	42.561		1
57	11.316	33.694	6.39	104.3	2.5	0.42	2.3	0.03	11.309	25.611	34.365	42.717		57
106	10.192	33.611	6.39	100.7	2.0	0.53	4.8	0.25	10.180	25.837	34.660	43.096		106
156	9.953	33.942	5.76	90.4	11.2	0.88	10.9	0.22	9.915	26.137	34.965	43.406		156
207	9.326	34.025	5.78	89.5	16.3	0.97	12.7	0.01	9.303	26.106	35.160	43.626		207
254	8.370	34.056	4.86	73.7	28.5	1.18	19.6	0.01	8.348	26.482	35.178	43.883		254
307	7.005	33.992	3.91	57.4	43.6	1.55	26.2	0.01	6.967	26.629	35.590	44.154		307
357	5.461	33.976	2.73	18.6	67.8	2.19	31.9	0.01	5.419	26.814	35.952	44.494		357
406	4.590	34.038	1.84	25.5	97.5	2.72	39.7	0.01	4.643	26.961	36.342	44.716		406
456	4.091	34.118	1.00	13.7	104.5	2.97	42.4	0.01	4.019	27.081	36.583	44.891		456
505	3.711	34.200	0.59	8.0	117.8	3.19	44.3	0.01	3.651	27.185	36.706	45.021		505
555	3.459	34.264	0.36	4.9	129.6	3.14	45.2	0.01	3.195	27.261	36.795	45.122		555
604	3.219	34.329	0.25	3.4	137.3	3.21	45.6	0.01	3.149	27.335	36.881	45.220		604
654	2.754	34.416	0.25	3.3	154.9	3.22	46.0	0.01	2.668	27.464	36.634	45.395		654
703	2.441	34.513	0.51	6.7	163.9	3.17	45.4	0.01	2.338	27.554	36.740	45.517		703
753	2.154	34.569	0.94	12.5	171.1	3.09	44.4	0.01	2.014	27.624	36.825	45.617		753
803	1.927	34.612	1.34	17.4	175.6	3.01	43.4	0.01	1.799	27.669	36.884	45.688		803
850	1.682	34.639	2.10	27.1	174.1	2.85	41.2	0.01	1.505	27.720	36.920	45.769		850
899	1.542	34.663	2.75	35.3	169.0	2.72	39.2	0.01	1.320	27.752	36.993	45.820		899
947	1.482	34.677	3.13	40.1	164.8	2.66	38.2	0.01	1.211	27.771	37.018	45.850		947
995	1.475	34.684	3.34	42.7	164.9	2.58	37.7	0.01	1.150	27.781	37.031	45.864		995
1043	1.509	34.687	3.43	43.8	162.2	2.57	37.4	0.01	1.125	27.795	37.036	45.873		1043
1091	1.554	34.688	3.51	44.8	160.6	2.57	37.1	0.01	1.101	27.787	37.039	45.877		1091
1139	1.581	34.689	3.56	45.5	157.7	2.53	36.7	0.01	1.098	27.789	37.041	45.879		1139

# MARATHON 2 STA. 50



R/V THOMAS WASHINGTON MARATHON LEG II STATION 11

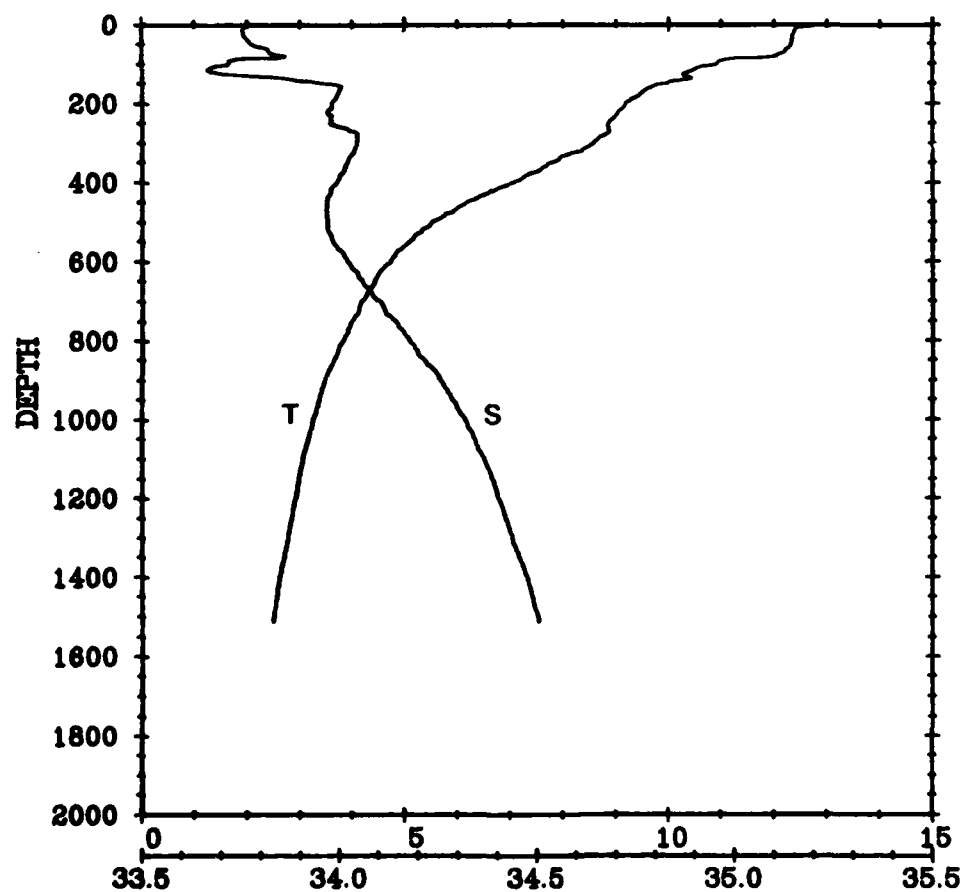
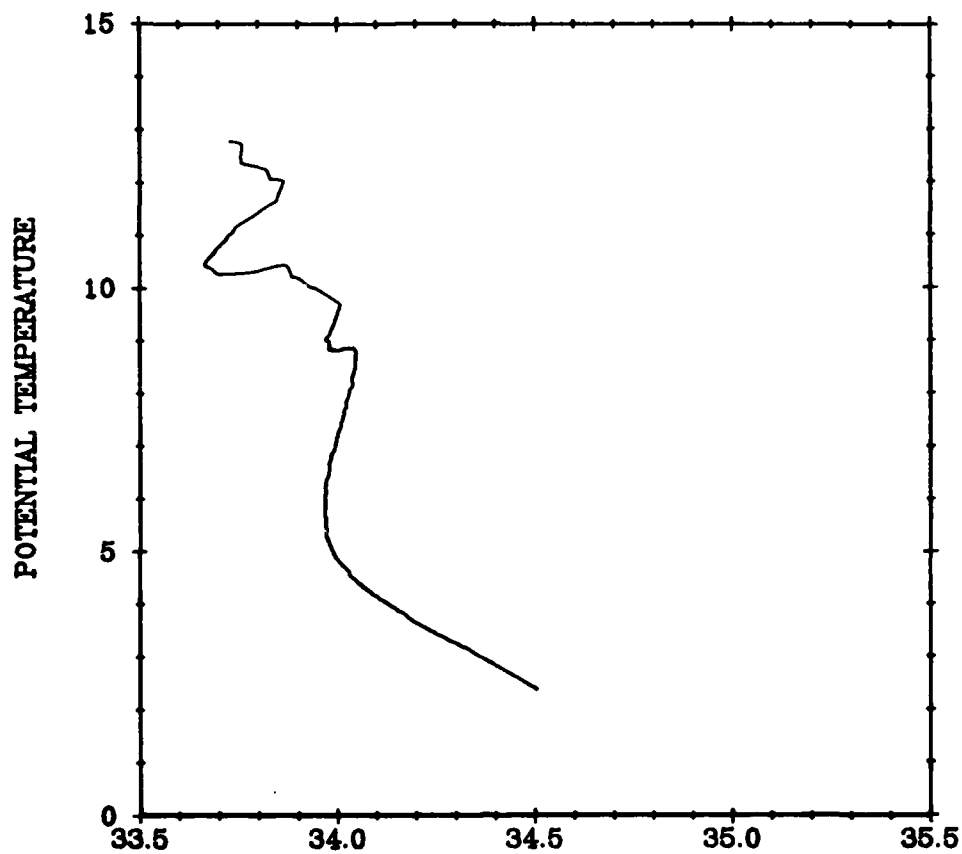
LATITUDE LONGITUDE MO-DY YR ST RT TIME BOTTOM WIND WIND SPEED AIR TEMP WET BULB BAROM  
 19 00 9N 151 54 1W 5/19/84 430 5358 LTD 7 12.8 10.7 1026.8

STD DATA  
 PRESS TEMP SALINITY POT TEMP SIGMA 0 SIGMA 2 SIGMA 4 SVA DYNAMIC HT DEPTH  
 DB DEG C DB DEG C M M M M M M M M M M  
 0 12.402 33.751 12.602 25.524 34.227 42.568 244.805 0.000 1.000 1  
 20 12.379 33.759 12.376 25.554 34.285 42.615 242.580 0.044 1.9 19  
 40 12.340 33.770 12.335 25.571 34.303 42.654 241.522 0.097 3.9 39  
 60 12.260 33.808 12.252 25.616 34.351 42.705 237.724 0.145 5.9 59  
 80 11.809 33.821 11.799 25.711 34.464 42.834 229.440 0.192 7.9 79  
 100 10.858 33.712 10.846 25.800 34.594 43.002 220.953 0.237 9.9 99  
 120 9.926 33.955 9.909 26.152 34.981 43.423 198.324 0.339 14.9 149  
 140 9.195 33.982 9.171 26.294 35.154 43.625 175.852 0.430 19.9 199  
 160 8.870 33.993 8.843 26.347 35.222 43.707 171.687 0.527 24.9 249  
 180 8.569 34.044 8.538 26.442 35.330 43.826 163.430 0.621 29.9 299  
 200 7.914 34.020 7.709 26.537 35.459 43.989 154.844 0.681 34.7 347  
 220 7.079 33.993 7.041 26.620 35.577 44.138 147.192 0.755 39.7 397  
 240 6.207 33.968 6.168 26.716 35.715 44.315 139.709 0.827 44.6 446  
 260 5.561 33.959 5.519 26.797 35.828 44.458 130.300 0.895 49.6 496  
 280 4.733 34.020 4.686 26.934 36.005 44.673 121.513 1.018 59.6 596  
 300 4.206 34.097 4.154 27.052 36.149 44.842 109.566 1.130 69.4 694  
 320 3.930 34.176 3.772 27.154 36.269 44.979 97.234 1.232 79.3 793  
 340 3.481 34.254 3.418 27.251 36.384 45.110 88.269 1.325 89.2 892  
 360 3.265 34.313 3.195 27.319 36.463 45.199 82.174 1.410 99.1 991  
 380 3.155 34.362 2.979 27.379 36.532 45.278 76.847 1.490 109.0 1090  
 400 2.918 34.399 2.816 27.420 36.582 45.334 73.187 1.565 118.8 1188  
 420 2.779 34.434 2.697 27.461 36.630 45.389 69.625 1.636 128.7 1287  
 440 2.624 34.470 2.529 27.504 36.681 45.448 65.749 1.704 138.6 1386  
 460 2.511 34.498 2.401 27.535 36.719 45.492 62.939 1.768 148.5 1485  
 480 2.490 34.505 2.375 27.545 36.729 45.504 62.176 1.785 151.0 1510

NISKIN BOTTLE DATA  
 DEPTH TEMP SALINITY DIS D2 D2 SAT SIO3 PO4 NO3 NO2 TRIT POT TEMP SIGMA 0 SIGMA 2 SIGMA 4 PRESS  
 M DEG C DB DEG C ML L A UM/L UM/L UM/L UM/L TUSIN DEG C M M M M DB  
 0 12.744 33.767 5.11 105.1 1.7 0.39 1.2 0.03 12.744 25.489 34.205 42.541 3  
 20 12.294 33.762 5.33 104.4 1.9 0.37 1.5 0.04 12.277 25.575 34.310 42.663 53  
 40 12.102 33.697 5.31 100.6 1.5 0.59 3.9 0.28 10.688 25.809 34.609 43.024 100  
 60 11.104 33.945 5.38 95.4 6.9 0.67 7.0 0.12 10.688 25.932 34.710 43.142 134  
 80 9.996 34.116 5.44 89.5 1.7 0.99 12.7 0.01 9.577 26.254 35.097 43.551 163  
 100 9.160 34.111 5.79 89.4 21.2 1.11 14.9 0.00 9.240 26.305 35.163 43.631 201  
 120 8.883 34.011 5.93 84.8 28.0 1.35 18.9 0.00 8.897 26.366 35.240 43.724 247  
 140 8.555 34.055 4.92 74.9 45.2 1.86 26.3 0.00 8.544 26.450 35.337 43.833 294  
 160 6.951 33.993 3.90 57.2 62.6 2.29 32.1 0.00 6.924 26.637 35.600 44.167 394  
 180 5.702 33.969 3.34 43.1 81.0 2.53 36.7 0.00 5.651 26.780 35.803 44.427 484  
 200 4.847 34.003 2.49 30.4 97.6 2.97 40.4 0.00 4.802 26.907 35.973 44.636 575  
 220 4.121 34.073 1.49 20.5 112.6 3.03 43.0 0.00 4.271 27.021 36.112 44.799 667  
 240 3.971 34.243 0.88 12.0 125.6 3.15 44.6 0.00 3.915 27.113 36.221 44.925 762  
 260 3.601 34.224 0.46 6.2 134.3 3.20 45.4 0.00 3.540 27.215 36.342 45.062 861  
 280 3.359 34.289 0.29 3.2 152.8 1.24 45.8 0.00 3.292 27.290 36.428 45.160 960  
 300 2.866 34.412 0.24 6.2 167.3 45.6 0.00 2.782 27.435 36.599 45.355 1227  
 320 2.482 34.506 0.47 6.2 167.3 45.6 0.00 2.378 27.545 36.729 45.504 1523



# MARATHON 2 STA. 51



ROY THOMAS WASHINGTON MARATHON LEG II STATION 52

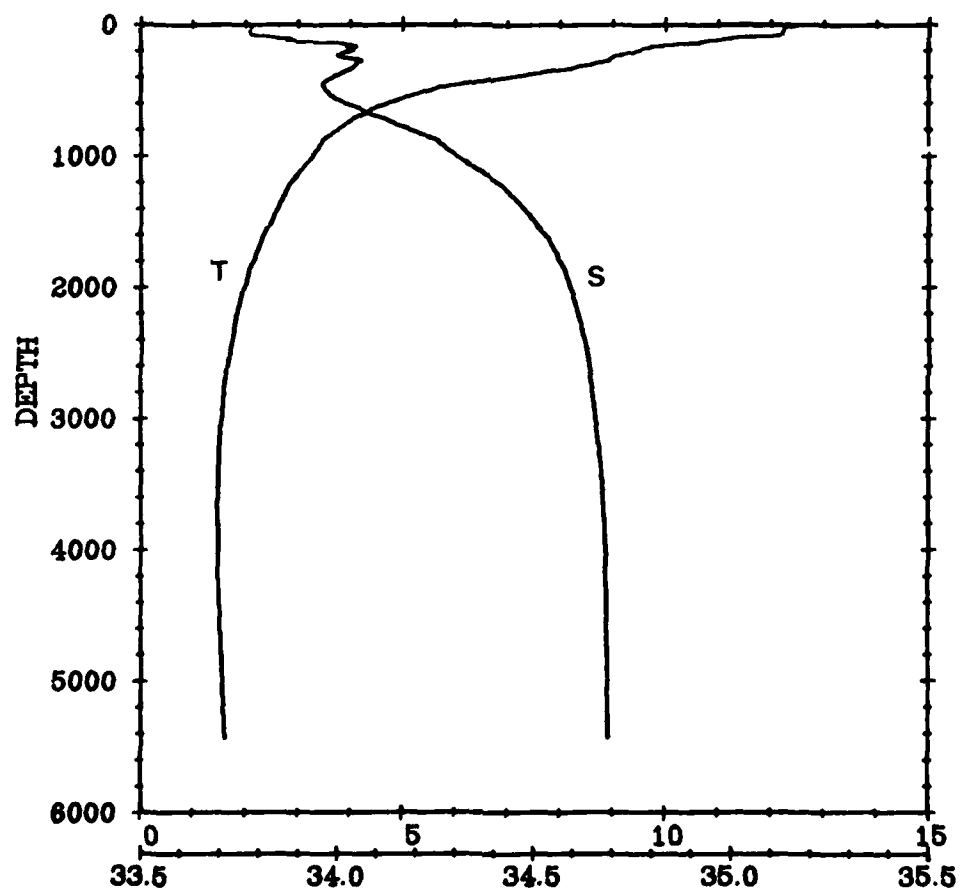
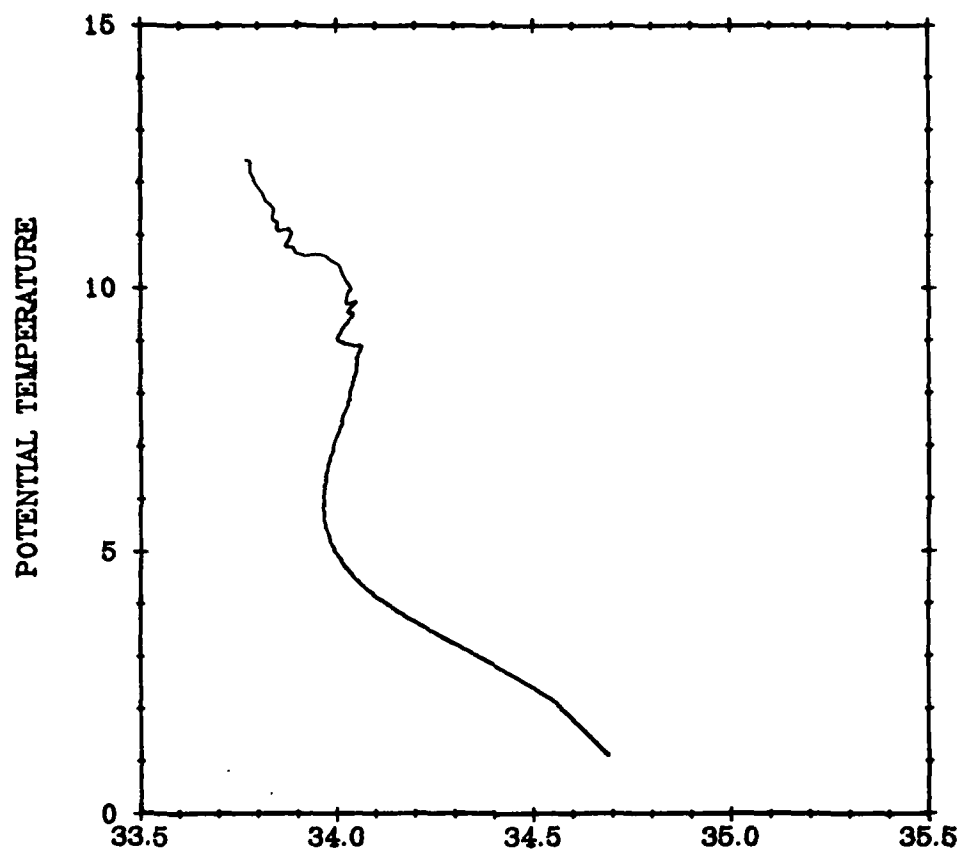
LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
19 14 3N 151 59 2W 5/20/94 1:42 3503 18: 20 12.8 11.7 1022.4

CTD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C					CLUTCH		M
0	12.431	33.777	12.431	25.557	34.285	42.474	241.736	0.000		0
20	12.314	33.780	12.311	25.583	34.316	42.468	239.842	0.048		19
40	12.221	33.780	12.216	25.621	34.338	42.463	238.611	0.096		39
60	12.201	33.780	12.193	25.635	34.344	42.460	238.710	0.144		59
80	12.047	33.792	12.037	25.645	34.389	42.450	235.489	0.191		79
100	11.339	33.843	11.327	25.816	34.589	42.476	219.575	0.237		99
120	10.254	34.011	10.237	26.140	34.954	43.382	189.760	0.339		149
140	9.482	34.038	9.460	26.291	35.139	43.597	175.227	0.430		198
160	8.998	34.015	8.971	26.352	35.221	43.700	171.264	0.517		248
180	8.619	34.051	8.587	26.440	35.326	43.820	163.672	0.601		298
200	8.398	34.010	8.363	26.532	35.451	43.975	155.325	0.681		347
220	7.068	33.992	7.030	26.621	35.579	44.140	147.114	0.756		397
240	6.203	33.965	6.164	26.714	35.714	44.314	138.179	0.828		446
260	5.541	33.969	5.499	26.800	35.831	44.462	130.051	0.895		496
280	4.750	34.019	4.703	26.931	36.001	44.669	117.788	1.019		547
300	4.193	34.098	4.131	27.055	36.153	44.817	105.228	1.131		594
320	3.774	34.181	3.717	27.163	36.282	44.994	95.211	1.232		643
340	3.451	34.259	3.388	27.257	36.392	45.120	87.563	1.324		692
360	3.285	34.301	3.215	27.307	36.450	45.196	81.289	1.409		741
380	3.092	34.351	3.016	27.365	36.519	45.261	75.076	1.490		790
400	2.892	34.402	2.810	27.425	36.588	45.342	72.672	1.565		839
420	2.745	34.441	2.656	27.470	36.640	45.401	68.712	1.636		888
440	2.611	34.472	2.516	27.506	36.684	45.452	65.453	1.703		936
460	2.491	34.499	2.389	27.539	36.723	45.497	62.612	1.767		984
480	2.363	34.527	2.255	27.572	36.763	45.543	59.558	1.828		1033
500	2.265	34.548	2.150	27.598	36.794	45.579	57.354	1.887		1081
520	2.173	34.564	2.051	27.618	36.820	45.610	55.546	1.943		1130
540	2.060	34.581	1.931	27.641	36.849	45.645	53.381	1.998		1178
560	1.997	34.590	1.861	27.654	36.865	45.665	52.371	2.051		1227
580	1.908	34.601	1.765	27.670	36.887	45.691	50.871	2.102		1275
600	1.846	34.611	1.695	27.684	36.904	45.712	49.749	2.152		1323
620	1.790	34.619	1.631	27.695	36.918	45.730	48.924	2.202		1372
640	1.733	34.625	1.586	27.703	36.929	45.742	48.255	2.250		1420
660	1.712	34.633	1.527	27.714	36.943	45.759	47.365	2.298		1468
680	1.669	34.639	1.485	27.722	36.953	45.772	46.812	2.345		1516
700	1.635	34.644	1.443	27.729	36.962	45.783	46.311	2.392		1564
720	1.607	34.649	1.407	27.735	36.971	45.794	45.903	2.438		1612
740	1.584	34.652	1.375	27.740	36.977	45.802	45.676	2.484		1660
760	1.544	34.656	1.346	27.745	36.984	45.810	45.408	2.529		1708
780	1.541	34.660	1.314	27.751	36.992	45.819	45.389	2.574		1756
800	1.521	34.663	1.284	27.755	36.997	45.826	44.874	2.619		1804
820	1.507	34.667	1.261	27.760	37.004	45.834	44.665	2.664		1852
840	1.492	34.670	1.235	27.764	37.009	45.840	44.506	2.709		1900
860	1.484	34.672	1.218	27.767	37.013	45.845	44.515	2.753		1948
880	1.478	34.674	1.202	27.770	37.017	45.850	44.549	2.798		1996
900	1.474	34.676	1.188	27.772	37.020	45.854	44.610	2.842		2044
920	1.472	34.678	1.175	27.775	37.023	45.858	44.699	2.887		2092
940	1.477	34.679	1.170	27.776	37.025	45.859	44.966	2.932		2140
960	1.478	34.681	1.160	27.778	37.027	45.863	45.099	2.977		2188
980	1.479	34.682	1.150	27.780	37.030	45.865	45.302	3.022		2236
1000	1.485	34.683	1.144	27.781	37.031	45.867	45.584	3.068		2284
1020	1.492	34.683	1.140	27.781	37.031	45.868	45.954	3.113		2332
1040	1.500	34.684	1.136	27.782	37.033	45.869	46.271	3.159		2380
1060	1.508	34.684	1.133	27.782	37.033	45.870	46.659	3.206		2428
1080	1.517	34.685	1.130	27.784	37.034	45.871	46.995	3.253		2476
1100	1.525	34.685	1.126	27.784	37.035	45.872	47.386	3.300		2524
1120	1.534	34.686	1.123	27.785	37.036	45.873	47.726	3.347		2572
1140	1.543	34.686	1.119	27.785	37.036	45.874	48.116	3.395		2620
1160	1.554	34.686	1.118	27.785	37.037	45.874	48.584	3.444		2668
1180	1.563	34.687	1.114	27.786	37.038	45.875	48.929	3.493		2716
1200	1.574	34.687	1.113	27.786	37.038	45.875	49.180	3.542		2764
1220	1.585	34.687	1.111	27.786	37.038	45.876	49.834	3.591		2812
1240	1.596	34.687	1.109	27.787	37.038	45.876	50.289	3.641		2860
1260	1.608	34.688	1.107	27.787	37.039	45.877	50.696	3.692		2908
1280	1.613	34.687	1.108	27.787	37.039	45.876	50.944	3.709		2956

NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L		UM/L	UM/L	UM/L	UM/L	TU/L	DEG C				DB
1	12.347	33.769	5.34	104.8	3.2	0.35	1.4	0.05	12.347	25.567	34.299	42.650		1
55	12.105	33.773	6.28	103.2	3.2	0.37	1.7	0.08	12.098	25.618	34.360	42.719		55
106	10.651	33.954	6.01	95.8	5.5	0.66	7.0	0.02	10.619	25.948	34.748	43.162		106
158	9.712	34.061	5.75	89.9	14.8	0.92	12.2	0.01	9.694	26.270	35.107	43.556		158
307	8.148	34.040	4.68	70.6	31.6	1.47	20.8	0.01	8.117	26.503	35.409	43.924		309
406	6.487	33.979	3.57	51.8	50.5	2.00	28.3	0.00	6.450	26.687	35.672	44.260		408
507	5.373	33.980	2.66	37.6	69.5	2.42	34.2	0.00	5.331	26.828	35.867	44.506		510
606	4.565	34.043	1.68	23.3	90.0	2.77	35.3	0.00	4.518	26.970	36.049	44.725		610
705	4.042	34.129	0.96	13.1	107.1	2.99	42.5	0.00	3.990	27.094	36.198	44.898		710
805	3.683	34.205	0.55	7.5	120.1	3.12	44.2	0.00	3.625	27.191	36.314	45.031		811
907	3.396	34.277	0.33	4.4	132.9	3.14	45.1	0.00	3.332	27.277	36.414	45.144		914
1011	3.218	34.322	0.25	3.4	138.8	3.19	45.5	0.00	3.149	27.330	36.475	45.215		1009
1244	2.799	34.431	0.26	3.5	154.4	3.22	45.9	0.00	2.713	27.457	36.624	45.382		1255
1510	2.474	34.507	0.47	6.2	167.1	3.17	45.5	0.00	2.371	27.546	36.731	45.526		1515
1749	2.198	34.565	0.98	12.8	172.8	3.09	44.1	0.00	2.068	27.618	36.819	45.607		1768
1996	1.960	34.601	1.36	17.7	180.2	2.99	41.2	0.00	1.823	27.666	36.879	45.681		2019
2497	1.693	34.638	2.07	26.7	179.1	2.85	38.3	0.00	1.516	27.719	36.948	45.765		2529
3495	1.452	34.676	3.12	40.0	170.9	2.63	38.3	0.00	1.211	27.771	37.017	45.849		3548
3945	1.478	34.683	3.29	42.1	171.9	2.59	37.9	0.00	1.153	27.780	37.030	45.865		4060
4487	1.515	34.686	3.16	42.9	174.1	2.57	37.5	0.00	1.132	27.784	37.034	45.871		4566
4969	1.560	34.687	3.40	43.8	168.9		37.2	0.00	1.116	27.786	37.037	45.875		5061
5425	1.613	34.688	3.51	44.8	166.0	2.52	37.1	0.00	1.108	27.787	37.039	45.877		5533

# MARATHON 2 STA. 52



R/V THOMAS WASHINGTON MARATHON LEG II STATION 13

LATITUDE LONGITUDE NO BY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
13 11 0N 152 0 4W 5-20 84 1724 5107 240 22 17.7 17.7 1010.2

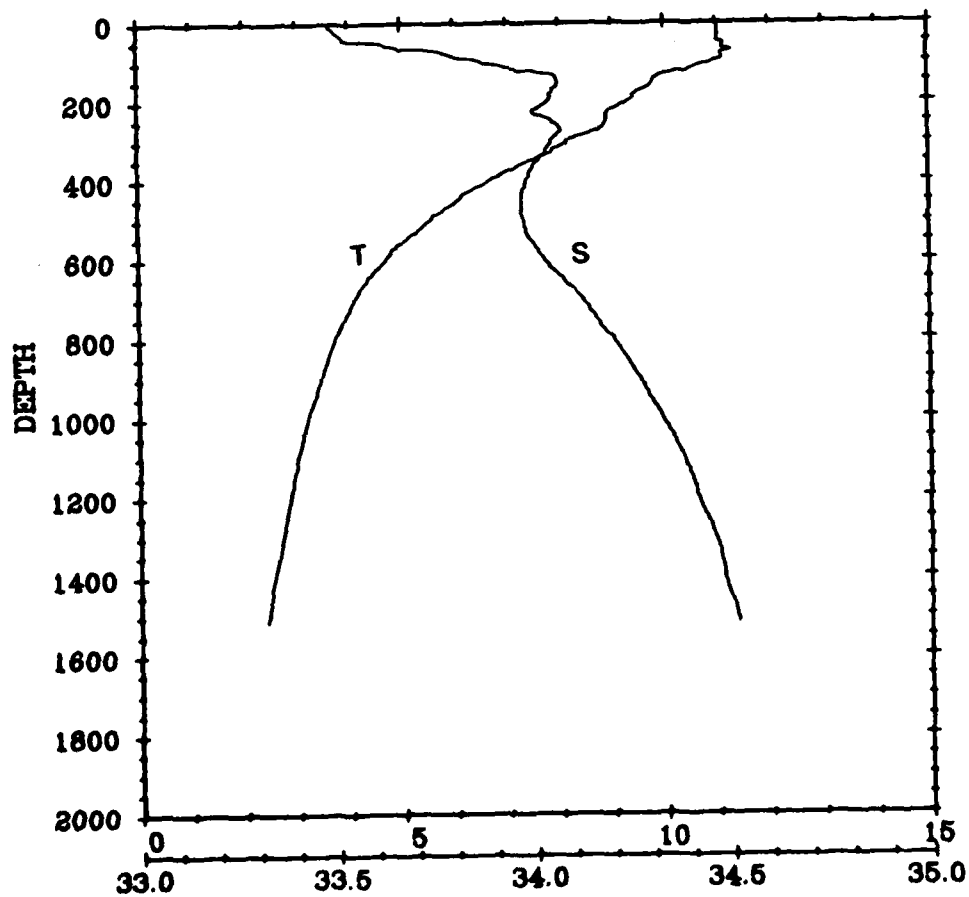
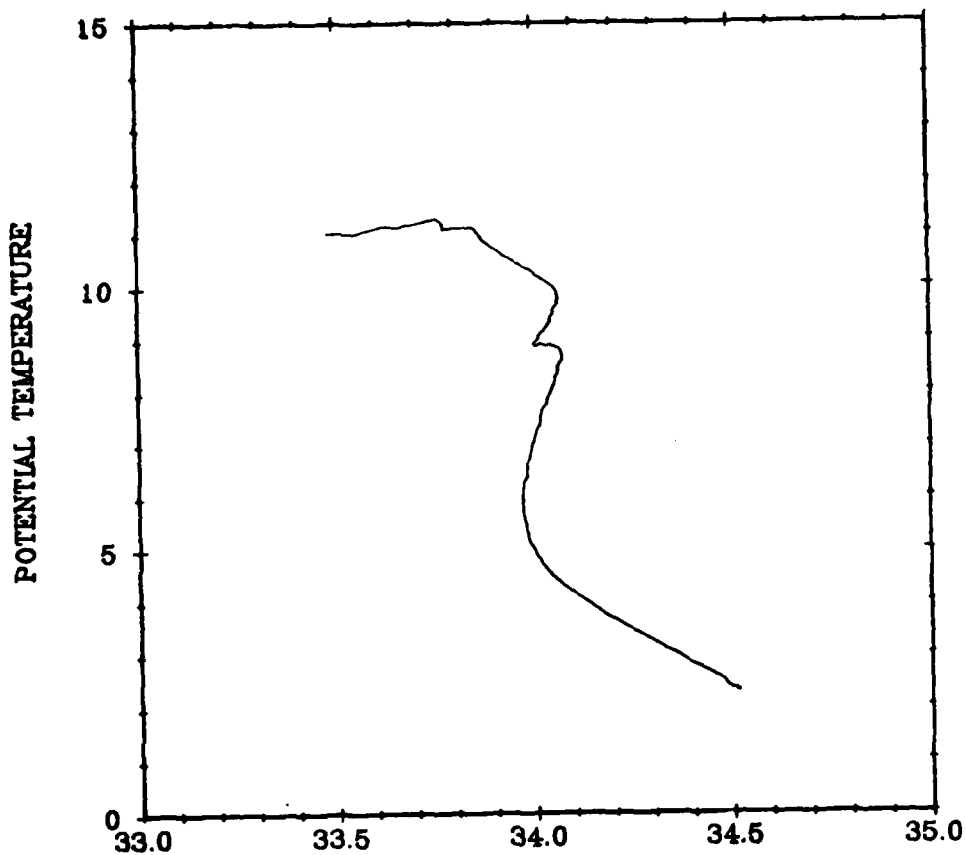
WTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CG/TON		M
1	11.145	33.494	11.135	27.589	34.178	42.792	238.713	0.000	0
20	11.135	33.497	11.133	27.600	34.189	42.792	238.173	0.049	19
40	11.143	33.531	11.138	27.625	34.414	42.817	236.218	0.093	39
60	11.161	33.650	11.154	27.697	34.479	42.876	229.870	0.144	59
80	11.192	33.792	11.142	27.702	34.582	42.978	220.194	0.187	79
100	10.929	33.971	10.917	27.912	34.777	43.103	210.418	0.237	99
120	9.827	34.263	9.793	28.257	35.030	43.536	178.499	0.327	119
140	9.102	34.537	9.290	28.319	35.175	43.641	173.456	0.415	139
160	8.989	34.746	8.960	28.394	35.257	43.751	167.255	0.500	159
180	8.183	34.748	8.149	28.504	35.419	43.922	157.107	0.581	179
200	7.483	34.714	7.446	28.590	35.518	44.051	150.501	0.658	199
220	6.683	33.992	6.653	28.664	35.639	44.218	142.688	0.732	219
240	5.759	33.970	5.720	28.726	35.742	44.349	135.941	0.801	239
260	4.746	33.916	4.714	28.814	35.816	44.456	129.593	0.868	259
280	4.474	34.226	4.640	28.944	36.017	44.637	126.812	0.991	279
300	4.103	34.221	4.283	27.991	36.143	44.691	123.626	1.111	299
320	3.724	34.248	3.669	27.192	36.302	45.017	94.423	1.200	319
340	3.459	34.252	3.396	27.259	36.393	45.120	87.410	1.291	339
360	3.210	34.321	3.141	27.310	36.477	45.213	80.367	1.375	359
380	3.074	34.374	2.993	27.392	36.548	45.297	75.433	1.453	379
400	2.874	34.411	2.792	27.414	36.597	45.352	71.404	1.527	399
420	2.717	34.480	2.629	27.479	36.651	45.417	67.731	1.597	419
440	2.564	34.480	2.469	27.517	36.697	45.467	64.727	1.663	439
460	2.442	34.509	2.341	27.551	36.737	45.513	61.312	1.725	459
480	2.402	34.516	2.299	27.560	36.749	45.527	57.496	1.745	479

NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	11.393	33.431	6.59	106.4	3.6	0.52	4.0	0.07	4.16	11.893	25.575	34.377	42.781	1
43	10.848	33.466	6.56	104.8	3.2	0.53	4.0	0.08	10.843	25.609	34.406	42.818	43	
102	10.954	33.879	5.90	94.5	7.6	0.62	7.3	0.02	10.842	25.930	34.722	43.128	112	
136	11.183	34.340	5.70	89.8	14.2	0.85	11.5	0.02	4.14	10.767	26.191	35.013	43.447	136
169	9.700	34.767	5.73	89.5	16.8	1.94	12.4	0.01		9.681	26.277	35.115	43.564	170
201	8.897	34.707	5.55	85.1	21.7	1.13	15.1	0.00		8.870	26.385	35.258	43.741	202
301	8.127	34.348	4.67	70.4	33.1	1.48	21.2	0.00		8.096	26.512	35.420	43.935	303
402	6.239	33.971	3.53	50.9	55.6	2.09	29.6	0.00		6.202	26.714	35.711	44.310	404
501	3.217	33.984	2.60	36.6	74.7	2.50	35.1	0.00	2.76	3.176	26.949	35.896	44.542	504
599	4.523	34.747	1.71	23.7	91.0	2.79	39.6	0.00	1.41	4.477	26.978	36.069	44.737	602
698	4.161	34.129	1.03	14.1	109.0	3.10	42.5	0.00	0.56	4.009	27.092	36.196	44.895	701
797	3.709	34.201	0.60	8.1	122.6	3.12	44.5	0.00	0.10	3.651	27.186	36.307	45.022	803
890	3.462	34.262	0.38	5.1	133.0	3.19	45.2	0.00	0.11	3.399	27.259	36.392	45.119	897
985	3.221	34.318	0.36	4.8	143.4	3.20	45.6	0.00	-0.13	3.152	27.327	36.472	45.211	993
1226	2.913	34.426	0.28	3.7	150.2	3.24	46.2	0.00		2.729	27.451	36.618	45.375	1217
1516	2.406	34.517	0.50	6.6	172.0		45.6	0.00		2.303	27.560	36.749	45.527	1511

# MARATHON 2 STA. 53



R/V THOMAS WASHINGTON MARATHON LEG II STATION 14

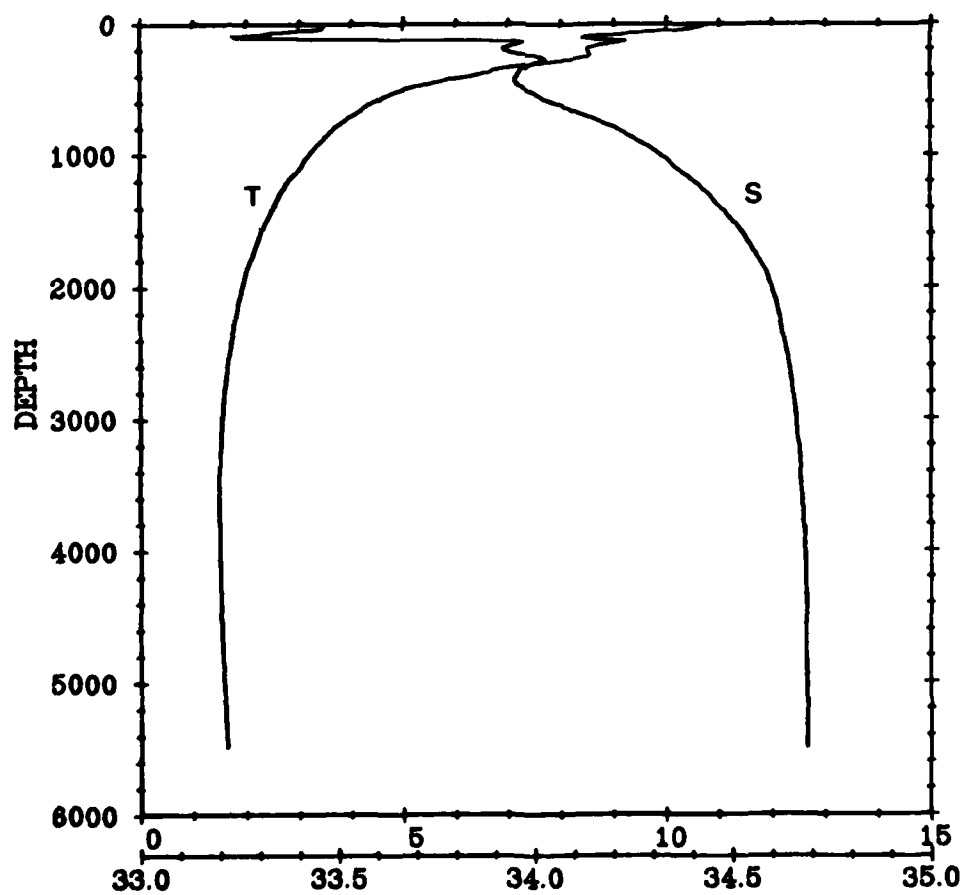
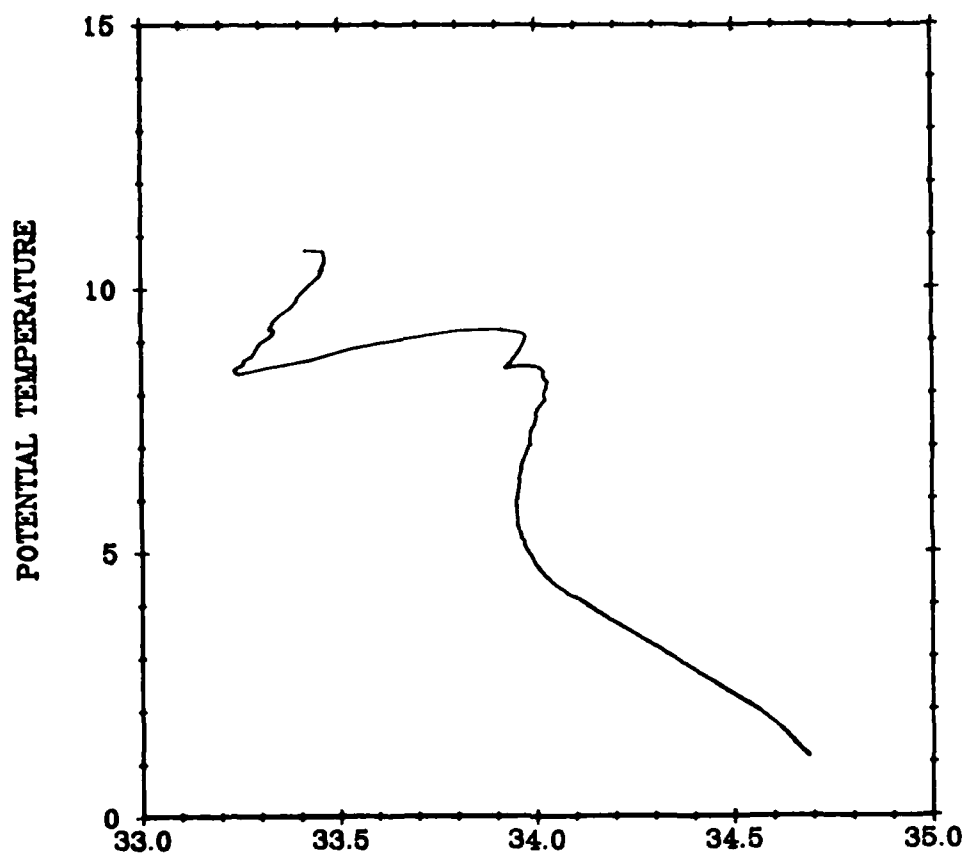
LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
19 52 30N 151 59 30W 5 21 84 4:18 5626 272 18 11.2 11.1 30.12

CTD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C			DEG C				CM/TON		M
0	10.712	33.448		10.712	25.518	34.421	42.918	235.446	0.175	0
20	10.670	33.452		10.668	25.517	34.442	42.960	234.420	0.147	14
40	10.428	33.456		10.423	25.577	34.492	42.920	231.101	0.094	34
60	9.758	33.386		9.751	25.734	34.578	41.134	225.257	0.139	54
80	9.103	33.318		9.095	25.784	34.652	41.142	221.724	0.194	74
100	8.516	33.253		8.506	25.847	34.729	41.237	217.911	0.228	94
120	8.977	33.164		8.961	25.313	35.134	41.584	172.912	0.126	114
140	8.507	33.125		8.486	25.357	35.249	41.749	169.182	0.411	134
160	8.506	34.007		8.480	25.422	35.317	41.812	164.372	0.405	154
180	7.688	34.003		7.659	25.541	35.459	44.001	151.459	0.574	174
200	6.772	33.967		6.740	25.640	35.612	44.197	144.224	0.649	194
220	6.334	33.957		6.269	25.694	35.687	44.285	139.447	0.722	214
240	5.626	33.951		5.569	25.779	35.807	44.417	131.477	0.788	234
260	5.051	33.979		5.011	25.895	35.920	44.574	123.314	0.851	254
280	4.442	34.044		4.397	25.984	36.077	44.751	112.313	0.969	274
300	4.047	34.127		3.996	27.042	36.131	44.897	102.521	1.076	294
320	3.679	34.209		3.622	27.135	36.134	45.033	91.384	1.174	314
340	3.435	34.265		3.372	27.264	36.194	45.127	84.919	1.264	334
360	3.202	34.319		3.131	27.349	36.476	45.215	81.126	1.348	354
380	3.036	34.358		2.950	27.377	36.531	45.281	76.809	1.427	374
400	2.859	34.405		2.728	27.415	36.602	45.350	71.520	1.501	394
420	2.643	34.442		2.561	27.479	36.654	45.420	67.556	1.571	414
440	2.521	34.471		2.427	27.513	36.696	45.468	64.513	1.637	434
460	2.397	34.499		2.296	27.547	36.735	45.514	61.533	1.700	454
480	2.268	34.527		2.161	27.590	36.776	45.561	58.459	1.760	474
500	2.192	34.547		2.068	27.603	36.804	45.594	56.456	1.817	494
520	2.101	34.565		1.980	27.625	36.830	45.624	54.520	1.873	514
540	1.995	34.585		1.868	27.650	36.861	45.660	52.323	1.926	534
560	1.911	34.596		1.796	27.664	36.879	45.682	51.113	1.978	554
580	1.874	34.607		1.731	27.678	36.896	45.702	50.017	2.029	574
600	1.824	34.616		1.673	27.698	36.910	45.713	49.184	2.078	594
620	1.776	34.622		1.618	27.698	36.923	45.735	48.429	2.127	614
640	1.734	34.628		1.568	27.707	36.934	45.748	47.805	2.175	634
660	1.690	34.635		1.516	27.716	36.946	45.753	47.264	2.223	654
680	1.651	34.641		1.468	27.724	36.957	45.775	46.445	2.269	674
700	1.621	34.645		1.430	27.730	36.965	45.786	46.072	2.316	694
720	1.590	34.650		1.390	27.737	36.974	45.797	45.602	2.362	714
740	1.565	34.655		1.356	27.744	36.982	45.807	45.200	2.407	734
760	1.544	34.658		1.326	27.748	36.988	45.815	44.937	2.452	754
780	1.531	34.661		1.304	27.752	36.994	45.821	44.876	2.497	774
800	1.518	34.664		1.281	27.756	36.997	45.828	44.759	2.542	794
820	1.503	34.667		1.257	27.760	37.004	45.834	44.607	2.586	814
840	1.485	34.670		1.234	27.764	37.009	45.840	44.500	2.631	834
860	1.469	34.672		1.223	27.767	37.012	45.844	44.389	2.676	854
880	1.484	34.674		1.208	27.769	37.016	45.849	44.319	2.720	874
900	1.482	34.676		1.196	27.772	37.019	45.852	44.212	2.765	894
920	1.483	34.678		1.186	27.774	37.022	45.855	44.059	2.810	914
940	1.435	34.679		1.177	27.775	37.024	45.858	43.931	2.855	934
960	1.436	34.680		1.167	27.777	37.026	45.860	43.795	2.900	954
980	1.430	34.681		1.160	27.778	37.027	45.862	43.548	2.945	974
1000	1.485	34.682		1.154	27.779	37.029	45.864	43.877	2.991	994
1020	1.503	34.683		1.151	27.780	37.030	45.866	46.134	3.037	1014
1040	1.510	34.684		1.146	27.781	37.031	45.867	46.437	3.083	1034
1060	1.518	34.684		1.142	27.782	37.032	45.868	46.827	3.130	1054
1080	1.525	34.684		1.138	27.782	37.032	45.869	47.201	3.177	1074
1100	1.535	34.685		1.135	27.783	37.034	45.870	47.558	3.224	1094
1120	1.545	34.685		1.133	27.783	37.034	45.870	47.987	3.272	1114
1140	1.556	34.685		1.132	27.783	37.034	45.871	48.435	3.320	1134
1160	1.565	34.686		1.128	27.784	37.035	45.872	48.779	3.369	1154
1180	1.575	34.686		1.126	27.785	37.036	45.872	49.213	3.418	1174
1200	1.585	34.686		1.123	27.785	37.036	45.873	49.649	3.467	1194
1220	1.596	34.686		1.121	27.785	37.036	45.873	50.114	3.517	1214
1240	1.609	34.686		1.121	27.785	37.036	45.873	50.539	3.568	1234
1260	1.621	34.687		1.120	27.786	37.037	45.874	51.008	3.618	1254
1280	1.633	34.687		1.119	27.786	37.037	45.875	51.479	3.668	1274

NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	PCT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	10.914	33.491	6.51	103.9	1.07	0.52	3.6	0.07	10.914	25.614	34.432	42.844	1	
55	10.685	33.338	6.52	103.8	1.07	0.52	3.6	0.07	10.678	25.694	34.497	42.914	55	
105	9.222	33.409	6.49	99.9	1.09	0.75	6.6	0.12	9.211	25.818	34.706	43.183	105	
156	8.978	33.373	5.76	98.5	1.12	1.02	13.2	0.11	8.961	26.320	35.190	43.670	156	
200	8.522	33.332	5.94	90.3	1.15	1.07	13.1	0.11	8.501	26.360	35.251	43.750	200	
304	7.844	34.120	4.71	70.5	12.6	1.49	21.1	0.11	7.814	26.512	35.453	44.380	304	
406	6.165	33.958	3.53	50.8	52.6	2.23	28.9	0.01	6.150	26.710	35.710	44.311	406	
505	5.154	33.373	2.58	35.3	72.5	2.43	14.5	0.03	5.111	26.849	35.898	44.547	505	
604	4.404	34.051	1.60	22.1	94.0	2.77	39.5	0.00	4.358	26.994	36.081	44.764	604	
703	4.044	34.128	1.03	14.1	107.1	2.97	42.1	0.00	3.952	27.093	36.198	44.998	703	
805	3.651	34.217	0.59	8.0	121.9	3.06	43.9	0.00	3.593	27.204	36.329	45.146	805	
916	3.368	34.292	0.36	4.8	132.8	3.13	44.8	0.00	3.334	27.294	36.442	45.153	916	
1005	3.122	34.339	0.28	3.7	141.2	3.18	45.2	0.00	3.052	27.353	36.503	45.246	1005	
1256	2.697	34.432	0.25	3.3	158.1	3.20	45.6	0.00	2.611	27.456	36.619	45.403	1256	
1506	2.379	34.506	0.41	5.4	170.0	3.16	45.5	0.00	2.277	27.553	36.743	45.721	1506	
1755	2.121	34.563	0.90	11.9	177.3	3.08	44.0	0.00	2.002	27.621	36.825	45.618	1755	
2006	1.938	34.599	1.34	17.4	183.2	2.99	43.0	0.00	1.800	27.666	36.880	45.681	2006	
2505	1.494	34.639	2.07	26.7	179.9	2.86	41.1	0.00	1.506	27.720	36.950	45.768	2505	
3003	1.541	34.662	2.67	34.3	174.5	2.73	39.3	0.00	1.319	27.752	36.992	45.819	3003	
3504	1.478	34.676	3.04	38.9	172.1	2.65	38.2	0.00	1.206	27.771	37.017	45.850	3504	
4002	1.488	34.683	3.22	41.2	174.8	2.60	37.9	0.00	1.162	27.780	37.028	45.863	4002	
4499	1.523	34.686	3.33	42.6	172.8	2.58	37.6	0.00	1.138	27.794	37.034	45.870	4499	
4994	1.572	34.687	3.38	43.2	167.0		37.4	0.00	1.124	27.785	37.036	45.873	4994	
5492	1.634	34.688			159.7	2.56	37.0	0.01	1.119	27.786	37.038	45.875	5492	

# MARATHON 2 STA. 54



R/V THOMAS WASHINGTON MARATHON LEG 11 STATION 11

LATITUDE	LONGITUDE	MO	DAY	HR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	SEA H
10 15.1N	152 01.1W	5	21	84	1113	4890	280	10	27.5	26.9	1.0

## STD DATA

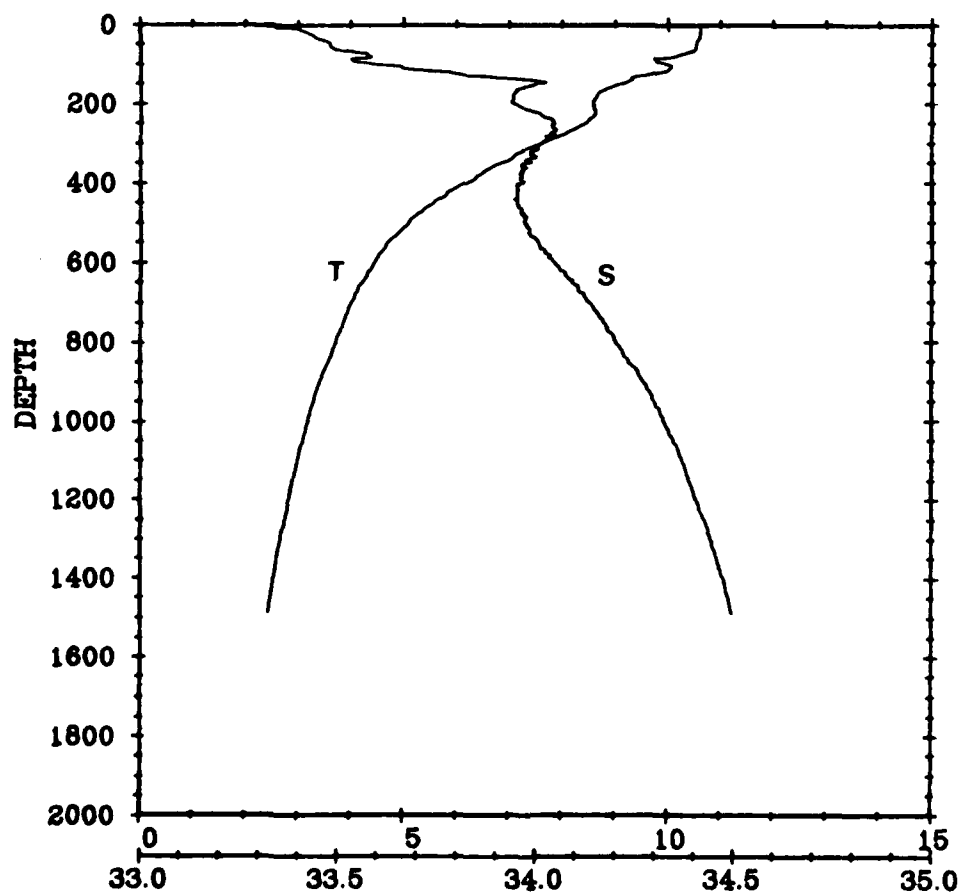
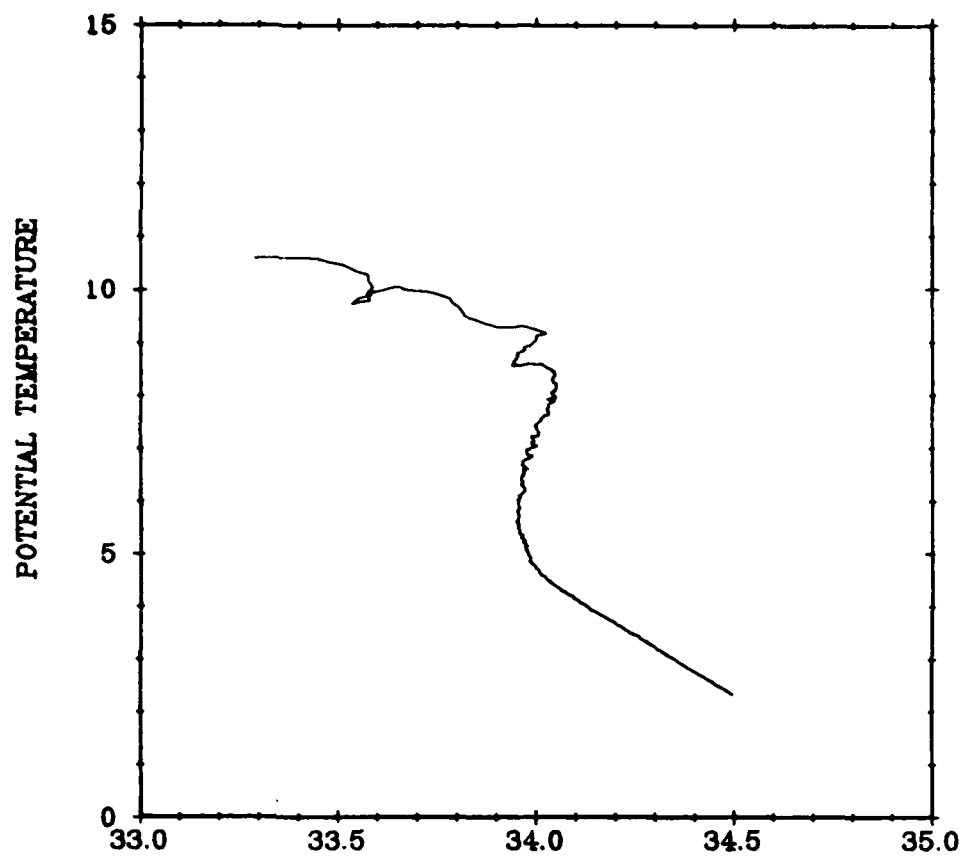
PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				TL TUN		M
10	10.405	33.338	10.405	25.541	14.760	42.793	242.119	1.143	19
20	10.602	33.415	10.598	25.513	14.421	44.843	235.934	1.143	19
30	10.556	33.460	10.551	25.556	14.465	44.889	231.482	1.143	19
40	10.487	33.497	10.480	25.617	14.519	42.974	229.806	1.143	19
50	10.380	33.564	10.371	25.819	14.547	41.298	218.542	1.143	19
60	9.934	33.593	9.923	25.871	14.705	41.101	214.197	1.143	19
70	9.105	33.491	9.089	26.314	15.109	41.973	172.865	1.143	149
80	8.581	33.947	8.559	26.363	15.251	41.748	169.140	1.143	149
90	8.417	34.141	8.391	26.452	15.357	41.859	160.500	1.143	149
100	7.619	34.119	7.609	26.541	15.491	44.127	150.598	1.143	149
110	6.891	33.978	6.859	26.633	15.549	44.168	147.112	1.143	149
120	6.229	33.962	6.194	26.719	15.715	44.105	139.110	1.143	149
130	5.601	33.952	5.564	26.778	15.877	44.405	131.482	1.143	149
140	5.116	33.973	5.076	26.852	16.005	44.655	124.578	1.143	149
150	4.455	34.040	4.421	26.979	16.263	44.744	112.944	1.143	149
160	4.317	34.127	4.286	27.093	16.399	44.579	104.115	1.143	149
170	3.714	34.198	3.677	27.181	16.501	45.110	94.101	1.143	149
180	3.437	34.265	3.374	27.264	16.599	45.127	84.456	1.143	149
190	3.195	34.319	3.126	27.330	16.677	45.217	75.748	1.143	149
200	2.944	34.364	2.919	27.395	16.742	45.292	65.118	1.143	149
210	2.834	34.401	2.752	27.429	16.795	45.352	52.118	1.143	149
220	2.676	34.439	2.598	27.474	16.848	45.403	48.281	1.143	149
230	2.348	34.469	2.454	27.509	16.890	45.461	64.457	1.143	149
240	2.437	34.494	2.336	27.539	16.726	45.573	62.159	1.143	149
250	2.428	34.496	2.327	27.542	16.729	45.576	62.114	1.143	149

## NEKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TURBIN	DEG C				DB
1	10.494	33.432	6.51	104.7	3.7	0.54	4.1	0.08	10.494	25.544	14.456	42.891	1	
2	10.468	33.443	6.58	104.2	3.4	0.59	4.1	0.08	10.462	25.458	14.471	42.892	12	
3	10.376	33.421	6.14	99.5	3.3	0.65	5.4	0.44	10.325	25.471	14.701	43.142	92	
162	9.702	33.454	5.89	89.9	1.9	1.05	13.0	0.01	8.685	26.149	15.231	43.723	143	
194	9.574	33.956	5.90	89.8	1.9	1.04	13.0	0.01	8.654	26.371	15.253	43.756	175	
246	8.111	34.142	4.76	75.1	2.9	1.39	19.1	0.01	9.295	26.479	15.378	43.895	247	
300	7.482	34.116	4.45	66.1	3.8	1.67	23.1	0.01	7.453	26.573	15.510	44.053	302	
427	5.930	33.953	3.20	45.7	5.8	2.19	30.7	0.01	5.794	26.751	15.768	44.326	430	
511	4.908	33.985	2.11	32.3	8.0	2.60	36.4	0.00	4.968	26.885	15.948	44.618	514	
776	3.740	34.195	0.80	10.9	11.9	5.3	43.3	0.00	3.684	27.179	16.297	45.011	782	
902	3.405	34.271	0.46	6.2	13.1	2.3	44.8	0.00	3.341	27.271	16.408	45.137	909	
996	3.211	34.316	0.33	4.4	14.2	4.3	45.1	0.00	3.142	27.125	16.472	45.211	994	
1173	2.973	34.393	0.28	3.7	15.6	3.21	46.0	0.00	2.792	27.419	16.583	45.338	1124	
1465	2.453	34.490	0.16	4.7		0.10		0.00	2.353	27.534	16.720	45.496	1480	



# MARATHON 2 STA. 55

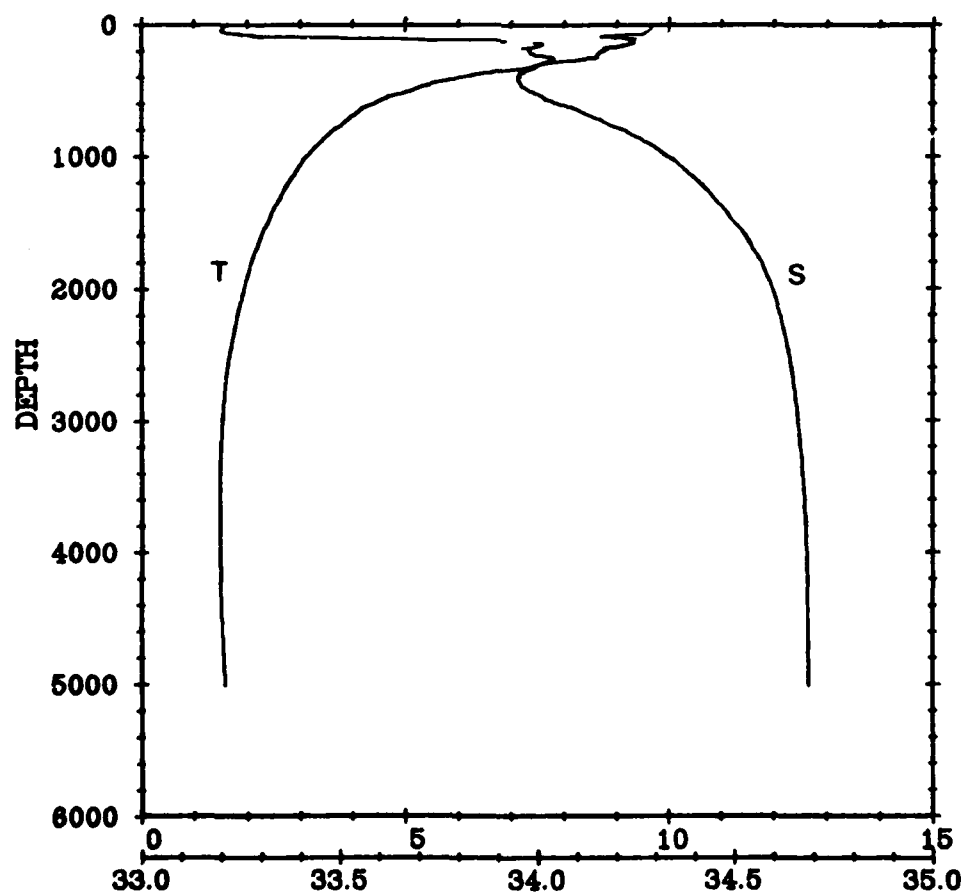
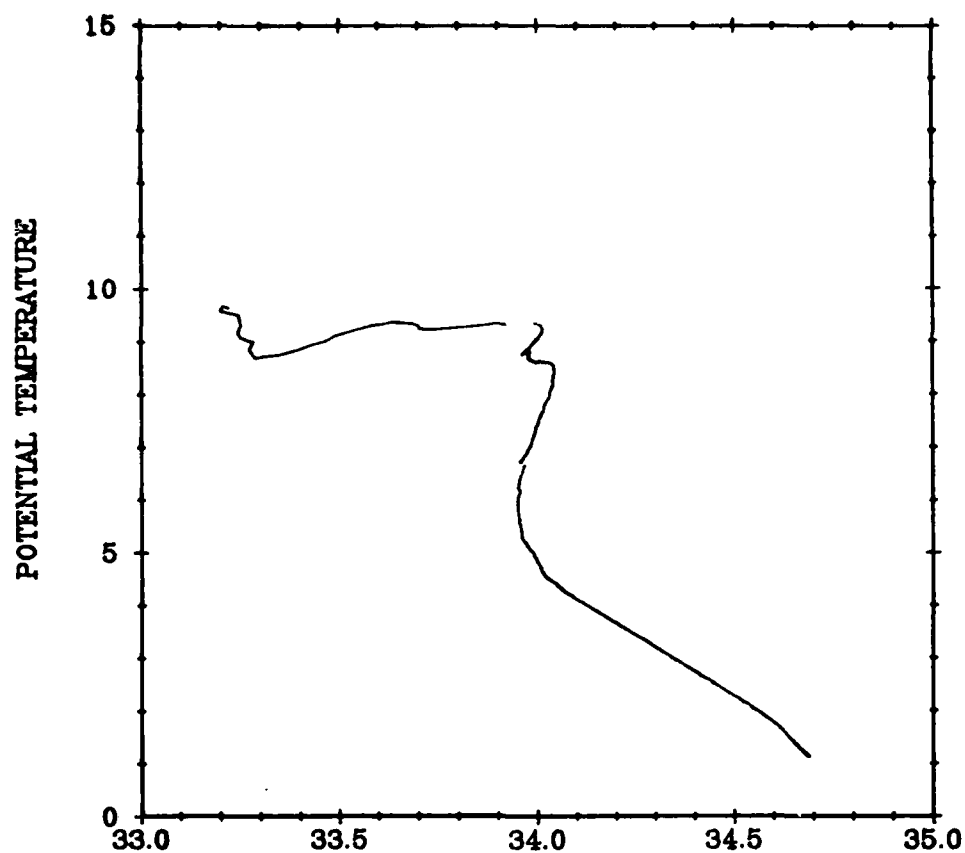


LATITUDE LONGITUDE MO. DY. YR. START TIME BOTTOM WIND SPEED AIR TEMP NET BULB BAROM  
40 37 4N 151 59 0W 5 22 84 116 4993 100 1.9 2.4 1.2 1022.0

STD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	9.580	33.210	9.560	25.611	34.462	42.924	206.540	1.000	0
20	9.564	33.217	9.552	25.608	34.459	42.927	207.295	1.047	19
40	9.533	33.204	9.529	25.612	34.464	42.927	207.403	1.093	39
60	9.558	33.210	9.551	25.629	34.484	42.951	206.153	1.142	59
80	9.555	33.261	9.546	25.734	34.656	43.088	206.423	1.189	79
100	9.539	33.460	9.529	25.909	34.797	43.267	207.339	1.242	99
120	9.512	34.011	9.516	26.309	35.149	43.617	199.150	1.288	119
140	9.442	33.979	9.421	26.363	35.244	43.751	199.110	1.414	139
160	9.471	34.034	9.447	26.433	35.300	43.847	199.160	1.497	159
180	9.477	34.010	9.458	26.554	35.484	44.121	199.251	1.576	179
200	9.489	33.971	9.466	26.628	35.594	44.164	199.491	1.650	199
220	9.413	33.952	9.418	26.715	35.718	44.323	197.347	1.721	219
240	9.494	33.957	9.437	26.795	35.829	44.452	199.794	1.798	239
260	9.415	33.958	9.436	26.854	35.955	44.555	199.426	1.871	259
280	9.433	34.248	9.488	26.989	36.074	44.756	199.912	1.959	279
300	9.456	34.134	9.455	27.152	36.259	44.920	199.831	2.046	299
320	9.466	34.210	9.469	27.197	36.321	45.038	199.855	2.130	319
340	9.395	34.275	9.312	27.276	36.414	45.145	199.641	2.211	339
360	9.344	34.325	9.375	27.140	36.490	45.212	199.864	2.245	359
380	9.245	34.371	9.370	27.195	36.555	45.176	199.955	2.323	379
400	9.290	34.428	9.499	27.439	36.628	45.368	199.974	2.496	399
420	9.419	34.441	9.451	27.479	36.655	45.421	199.517	2.565	419
440	9.437	34.471	9.403	27.515	36.699	45.472	199.212	2.631	439
460	9.389	34.495	9.287	27.545	36.734	45.513	199.652	2.694	459
480	9.261	34.525	9.254	27.579	36.775	45.561	199.536	2.754	479
500	9.279	34.544	9.265	27.601	36.802	45.592	199.642	2.811	499
520	9.280	34.565	9.359	27.626	36.833	45.629	199.373	2.867	519
540	9.213	34.578	9.385	27.643	36.853	45.652	199.038	2.921	539
560	9.140	34.592	9.305	27.660	36.875	45.677	199.734	2.973	559
580	9.393	34.574	9.740	27.674	36.892	45.698	199.346	3.024	579
600	9.110	34.513	9.679	27.696	36.908	45.716	199.404	3.074	599
620	9.175	34.522	9.617	27.698	36.923	45.735	199.417	3.123	619
640	9.129	34.529	9.562	27.708	36.935	45.750	199.456	3.171	639
660	9.079	34.576	9.504	27.719	36.948	45.766	199.237	3.219	659
680	9.079	34.542	9.456	27.726	36.957	45.779	199.202	3.264	679
700	9.003	34.647	9.414	27.733	36.969	45.791	199.116	3.310	699
720	9.000	34.652	9.380	27.740	36.977	45.801	199.123	3.356	719
740	9.059	34.675	9.350	27.744	36.993	45.808	199.118	3.401	739
760	9.041	34.679	9.323	27.749	36.990	45.816	199.873	3.446	759
780	9.021	34.693	9.294	27.754	36.996	45.825	199.592	3.491	779
800	9.009	34.695	9.272	27.759	37.001	45.830	199.545	3.535	799
820	9.099	34.669	9.252	27.762	37.006	45.837	199.392	3.580	819
840	9.089	34.670	9.224	27.764	37.010	45.841	199.447	3.624	839
860	9.080	34.674	9.214	27.769	37.015	45.848	199.313	3.669	859
880	9.077	34.675	9.201	27.771	37.018	45.851	199.392	3.713	879
900	9.077	34.677	9.191	27.773	37.020	45.854	199.585	3.758	899
920	9.079	34.679	9.181	27.775	37.023	45.857	199.721	3.802	919
940	9.080	34.690	9.172	27.776	37.025	45.859	199.942	3.847	939
960	9.082	34.691	9.164	27.778	37.027	45.862	199.162	3.892	959
980	9.087	34.692	9.157	27.779	37.029	45.864	199.430	3.937	979
1000	9.093	34.693	9.152	27.780	37.030	45.865	199.714	3.983	999
1020	9.099	34.693	9.147	27.781	37.031	45.866	199.069	4.029	1019
1040	9.102	34.694	9.144	27.782	37.032	45.868	199.403	4.075	1039
1060	9.107	34.695	9.141	27.783	37.033	45.869	199.740	4.122	1059
1080	9.109	34.695	9.140	27.784	37.034	45.869	199.182	4.168	1079
1100	9.109	34.696	9.139	27.784	37.034	45.870	199.557	4.216	1099
1120	9.109	34.696	9.139	27.784	37.034	45.870	199.021	4.264	1119
1140	9.109	34.696	9.138	27.784	37.034	45.870	199.471	4.312	1139
1160	9.109	34.696	9.137	27.784	37.034	45.870	199.940	4.361	1159
1180	9.109	34.696	9.137	27.784	37.034	45.871	199.411	4.410	1179
1200	9.109	34.696	9.136	27.784	37.034	45.871	199.450	4.454	1199

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	9.789	33.273	6.65	103.6	6.0	0.71	5.9	0.39	9.789	25.619	34.483	42.919		1
36	9.759	33.266	6.66	103.7	6.2	0.73	6.0	0.39	9.753	25.619	34.485	42.943		36
127	9.010	33.514	6.28	96.3	7.1	0.96	9.4	0.32	9.999	25.955	34.810	43.315	107	
157	8.970	33.972	5.80	89.1	17.9	1.03	13.4	0.22	9.953	26.321	35.191	43.671	157	
226	8.629	33.966	5.89	89.6	19.2	1.03	13.5	0.32	9.997	26.373	35.260	43.755	207	
327	7.496	34.005	4.50	66.9	37.3	1.63	22.8	0.01	7.466	26.570	35.507	44.049	309	
426	5.914	33.954	3.36	48.1	57.9	2.16	30.4	0.01	5.879	26.741	35.754	44.369	409	
526	4.970	33.995	2.39	33.3	77.8	2.56	35.9	0.01	4.930	26.879	35.938	44.595	509	
626	4.256	34.062	1.53	21.1	96.2	2.84	40.1	0.00	4.810	27.038	36.097	44.793	610	
726	3.988	34.140	0.99	13.4	110.0	2.99	42.4	0.00	3.916	27.109	36.216	44.919	711	
826	3.652	34.215	0.61	8.3	122.4	3.29	44.0	0.00	3.554	27.202	36.326	45.044	811	
923	3.397	34.274	0.43	5.8	132.2	3.13	44.8	0.00	3.333	27.274	36.411	45.141	910	
1000	3.187	34.319	0.39	5.2	140.5	3.20	45.1	0.00	3.117	27.331	36.479	45.218	1009	
1240	2.26	34.423	0.29	3.8	159.4	3.22	45.8	0.00	2.641	27.456	36.628	45.390	1252	
1495	2.02	34.495	0.42	5.5	170.8	3.19	45.8	0.00	2.370	27.543	36.731	45.510	1512	
1749	2.131	34.556	0.84	11.0	177.3	3.10	44.6	0.00	2.012	27.615	36.818	45.611	1715	
1998	1.959	34.593	1.23	16.0	180.6	3.02	43.5	0.00	1.922	27.659	36.873	45.675	2011	
2231	1.816	34.618	1.62	21.0	181.5	2.95	42.6	0.00	1.660	27.692	36.914	45.723	2259	
2473	1.687	34.638	2.02	26.1	182.2	2.89	41.4	0.00	1.512	27.719	36.948	45.766	2504	
2984	1.340	34.662	2.64	33.9	177.7	2.75	39.7	0.00	1.320	27.752	36.992	45.819	3026	
3527	1.479	34.678	3.07	39.3	175.4	2.64	39.4	0.00	1.255	27.772	37.019	45.852	3581	
4010	1.484	34.683	3.19	40.8	177.5	2.63	39.0	0.00	1.157	27.780	37.029	45.864	4076	
4499	1.525	34.686	3.27	41.3	179.3	2.61	38.4	0.00	1.140	27.783	37.034	45.870	4577	
5011	1.587	34.697	3.32	42.4	178.6	2.61	37.8	0.01	1.117	27.784	37.035	45.871	5100	

# MARATHON 2 STA. 56

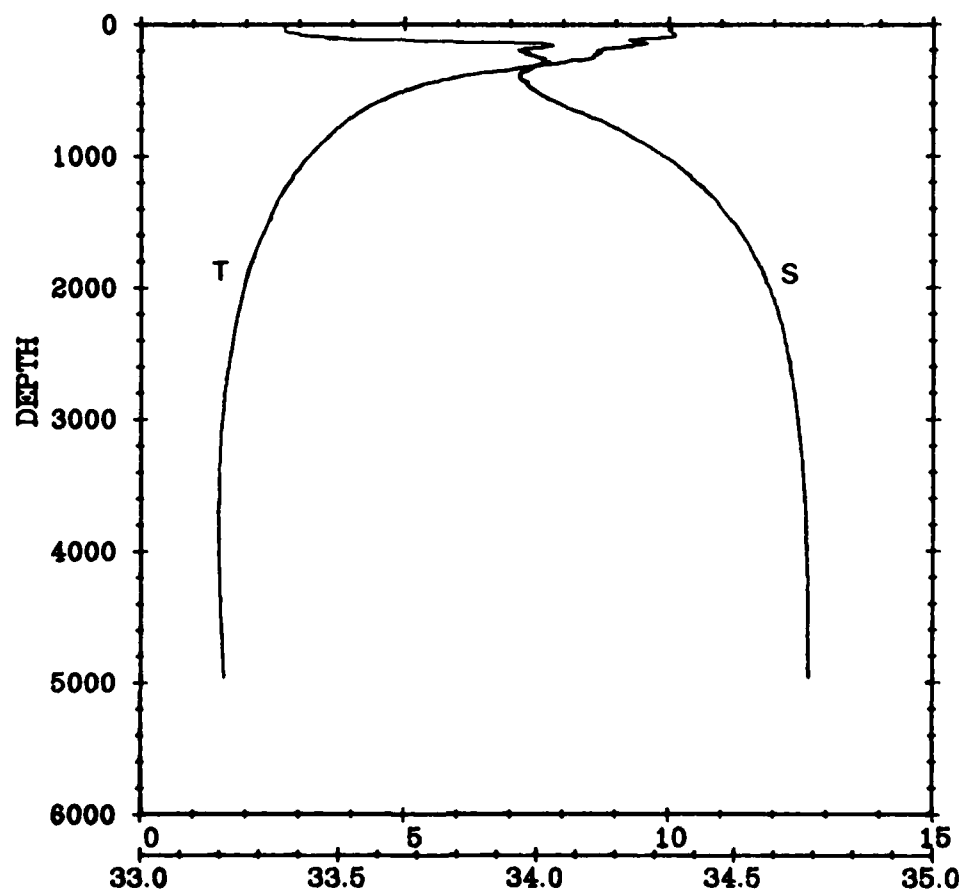
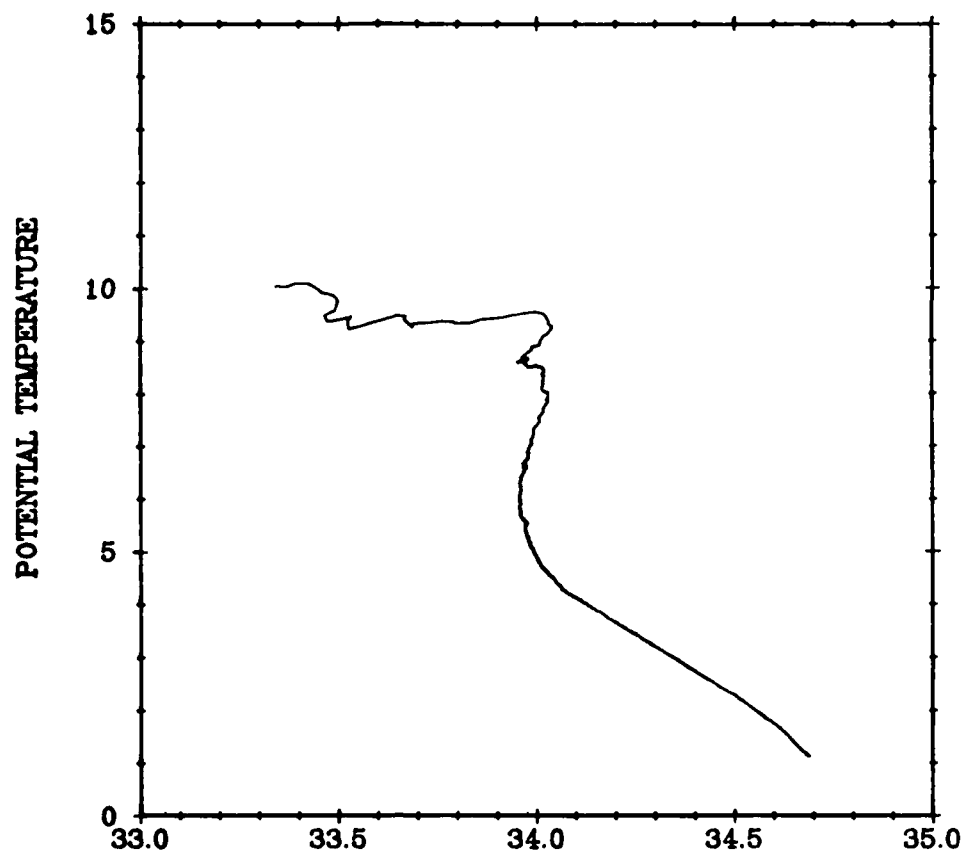


LATITUDE LONGITUDE MO. DY. YR. START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BATHM  
40 5 5N 121 59 5W 122 94 1424 474 100 10 10 10 10 10 10 10 10

STD DATA	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 1	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM		M
1	22.156	33.159	22.136	25.694	14.497	42.942	221.656	1.110	1
20	22.154	33.163	22.132	25.689	14.124	42.946	221.570	1.146	19
40	22.159	33.164	22.134	25.689	14.124	42.947	221.462	1.213	39
60	22.151	33.169	22.144	25.672	14.534	42.948	221.511	1.219	59
80	22.155	33.162	22.139	25.693	14.534	42.950	221.427	1.235	79
100	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	99
120	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	119
140	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	139
160	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	159
180	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	179
200	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	199
220	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	219
240	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	239
260	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	259
280	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	279
300	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	299
320	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	319
340	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	339
360	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	359
380	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	379
400	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	399
420	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	419
440	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	439
460	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	459
480	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	479
500	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	499
520	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	519
540	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	539
560	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	559
580	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	579
600	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	599
620	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	619
640	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	639
660	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	659
680	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	679
700	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	699
720	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	719
740	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	739
760	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	759
780	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	779
800	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	799
820	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	819
840	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	839
860	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	859
880	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	879
900	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	899
920	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	919
940	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	939
960	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	959
980	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	979
1000	22.155	33.162	22.139	25.700	14.517	43.169	222.920	2.270	999

WIGGIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PC4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PSU	ML/L	%	UM/L	UM/L	UM/L	UM/L	TURBIN	DEG C				DB
1	9.927	33.331	6.62	103.5	4.7	0.67	5.3	0.039	9.927	25.661	34.499	42.948		1
5	9.921	33.340	6.62	103.6	4.2	0.67	5.2	0.039	9.915	25.660	34.496	42.943		55
15	9.941	33.383	6.29	98.1	2.8	0.72	6.9	0.036	9.929	25.896	34.738	43.192		105
154	9.112	34.123	5.76	89.9	12.0	1.22	13.5	0.01	9.115	26.335	35.198	43.670		154
214	9.637	33.963	5.89	89.9	12.0	1.22	13.5	0.01	9.609	26.372	35.259	43.752		205
254	8.312	34.124	5.09	76.9	2.7	1.34	18.5	0.01	8.286	26.469	35.368	43.875		255
314	7.716	34.123	4.62	69.0	35.1	1.55	22.0	0.03	7.706	26.547	35.473	44.005		304
414	6.117	33.962	3.54	50.9	51.4	2.25	29.1	0.05	6.101	26.718	35.720	44.323		407
514	5.134	33.987	2.44	34.3	71.9	2.49	35.4	0.05	5.153	26.854	35.903	44.549		508
614	4.449	34.157	1.65	22.9	92.5	2.77	39.4	0.05	4.402	26.992	36.077	44.759		608
714	4.224	34.136	1.09	14.8	107.4	2.93	41.9	0.05	3.972	27.102	36.208	44.908		715
814	3.656	34.214	0.62	8.4	121.2	3.25	43.7	0.05	3.459	27.200	36.324	45.041		817
914	3.197	34.275	0.40	5.4	131.6	3.52	44.6	0.05	3.029	27.276	36.413	45.143		912
1014	2.639	34.329	0.34	4.6	145.1	3.77	45.1	0.05	2.599	27.341	36.496	45.232		1014
1214	2.119	34.425	0.30	4.0	157.7	3.12	45.6	0.05	2.432	27.459	36.531	45.391		1214
1314	2.386	34.124	2.46	6.0	171.0	3.14	45.4	0.05	2.284	27.551	36.541	45.520		1314
1414	2.113	34.156	0.35	11.1	178.2	3.26	44.5	0.05	1.994	27.416	36.821	45.614		1414
1514	1.929	34.193	1.28	16.6	182.1	3.25	43.3	0.05	1.793	27.663	36.879	45.682		1514
1614	1.634	34.433	1.99	25.7	180.1	2.96	41.3	0.05	1.514	27.719	36.948	45.765		1614
1714	1.377	34.462	2.64	33.9	177.9	2.70	39.6	0.05	1.315	27.752	36.993	45.820		1714
1814	1.475	34.576	3.07	39.3	176.3	2.62	38.3	0.05	1.204	27.771	37.019	45.851		1814
1914	1.492	34.683	3.22	41.2	177.6	2.70	37.8	0.05	1.156	27.780	37.029	45.864		1914
2014	1.524	34.696	3.30	42.2	179.4	2.70	37.9	0.05	1.140	27.781	37.034	45.870		2014
2114	1.581	34.697	3.10	42.2	180.0	2.57	37.7	0.05	1.119	27.784	37.035	45.871		2114

# MARATHON 2 STA. 57



LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
41 59.1N	152 13.1W	5 21 84	105	1103	191	10	8.3	7.2	1022.1

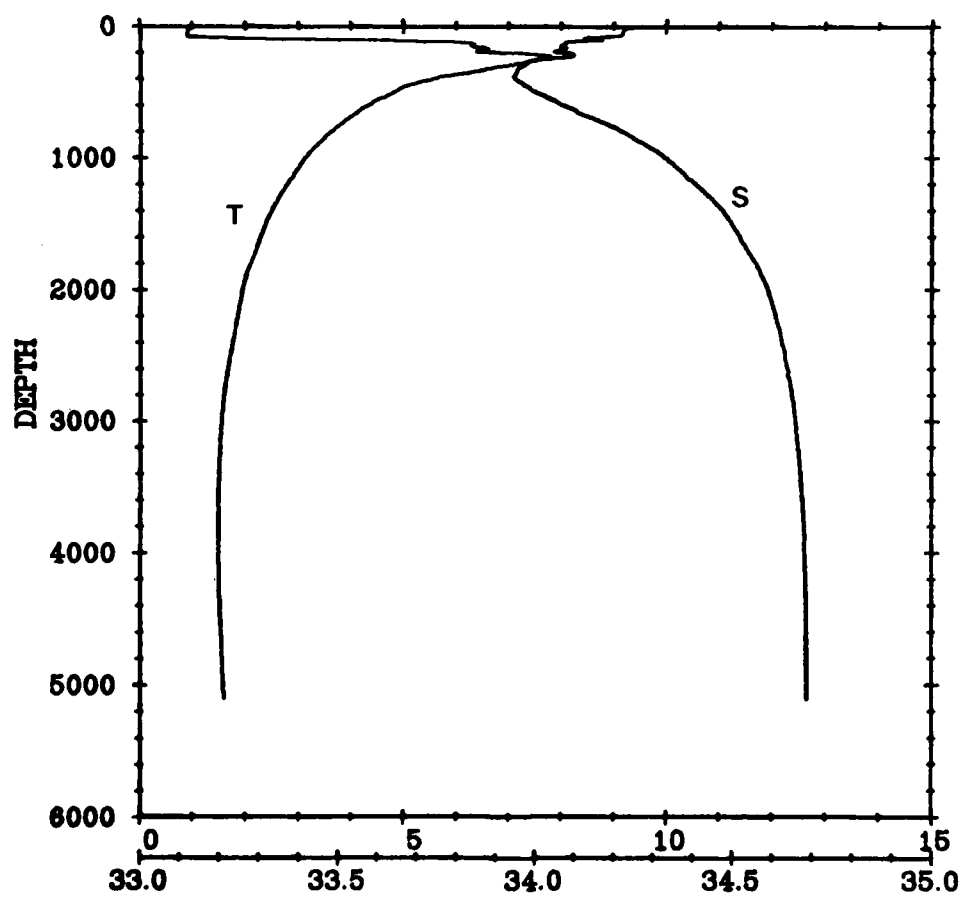
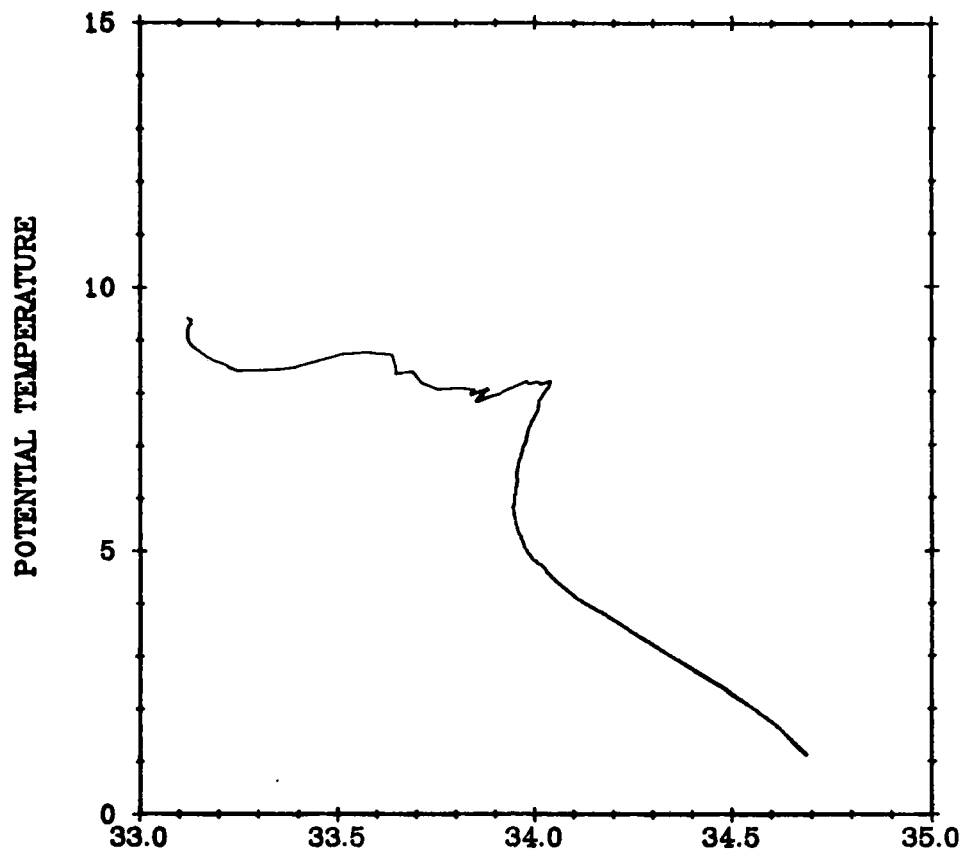
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CL TON		M
1	9.184	34.126	9.184	25.590	14.454	42.928	218.622	1.107	0
20	9.255	34.124	9.253	25.610	14.479	42.959	217.162	1.149	19
40	9.172	34.120	9.166	25.620	14.494	42.977	216.520	1.189	39
60	9.152	34.120	9.146	25.624	14.498	42.982	216.600	1.142	59
80	9.856	34.121	8.848	25.695	14.182	43.018	210.193	1.189	79
100	9.544	34.121	8.534	25.339	14.836	43.342	207.337	1.233	99
120	9.008	34.122	7.993	26.166	15.281	43.810	197.620	1.326	119
140	7.954	34.122	7.934	26.406	15.323	43.847	194.687	1.410	139
160	7.907	34.120	7.762	26.529	15.451	43.980	193.881	1.489	159
180	7.956	34.122	7.728	26.605	15.563	44.126	195.981	1.564	179
200	7.977	34.123	7.746	26.681	15.672	44.255	190.041	1.635	199
220	5.624	34.124	5.591	26.773	15.900	44.427	191.416	1.704	219
240	5.101	34.122	5.095	26.949	15.901	44.581	194.281	1.768	239
260	4.854	34.122	4.815	26.903	15.968	44.610	193.810	1.829	259
280	4.169	34.122	4.121	27.011	16.100	44.785	199.696	1.841	279
300	3.978	34.121	3.927	27.112	16.220	44.923	190.552	1.949	299
320	3.659	34.121	3.612	27.203	16.327	45.044	192.340	2.048	319
340	3.175	34.121	3.112	27.278	16.426	45.147	195.456	2.134	339
360	3.148	34.121	3.079	27.341	16.490	45.212	19.934	2.117	359
380	2.965	34.121	2.891	27.390	16.549	45.259	19.484	2.194	379
400	2.799	34.121	2.718	27.435	16.603	45.362	19.403	2.465	399
420	2.644	34.121	2.555	27.477	16.653	45.425	19.648	2.537	419
440	2.505	34.121	2.411	27.516	16.699	45.472	19.758	2.601	439
460	2.385	34.121	2.284	27.546	16.735	45.515	19.544	2.666	459
480	2.291	34.121	2.184	27.569	16.764	45.548	19.544	2.727	479
500	2.217	34.121	2.092	27.592	16.791	45.580	19.529	2.785	499
520	2.151	34.121	1.992	27.616	16.821	45.614	19.495	2.842	519
540	2.095	34.121	1.937	27.639	16.849	45.647	19.429	2.896	539
560	1.981	34.121	1.825	27.655	16.869	45.671	19.031	2.949	559
580	1.904	34.121	1.761	27.667	16.894	45.689	19.114	2.903	579
600	1.862	34.121	1.711	27.678	16.898	45.705	19.312	2.951	599
620	1.813	34.121	1.654	27.690	16.912	45.722	19.405	2.901	619
640	1.765	34.121	1.598	27.701	16.926	45.739	19.564	2.950	639
660	1.721	34.121	1.546	27.710	16.938	45.754	19.828	2.994	659
680	1.678	34.121	1.495	27.719	16.950	45.768	19.160	2.946	679
700	1.641	34.121	1.448	27.727	16.960	45.781	19.555	2.993	699
720	1.605	34.121	1.405	27.734	16.970	45.793	19.949	2.939	719
740	1.574	34.121	1.367	27.741	16.979	45.804	19.495	2.985	739
760	1.544	34.121	1.333	27.747	16.986	45.812	19.225	2.937	759
780	1.519	34.121	1.311	27.751	16.992	45.819	19.047	2.975	779
800	1.522	34.121	1.295	27.756	16.998	45.827	19.816	2.920	799
820	1.510	34.121	1.264	27.759	17.003	45.832	19.779	2.965	819
840	1.500	34.121	1.244	27.763	17.007	45.838	19.694	2.909	839
860	1.492	34.121	1.226	27.766	17.011	45.843	19.705	2.954	859
880	1.487	34.121	1.211	27.769	17.016	45.848	19.684	2.999	879
900	1.482	34.121	1.196	27.772	17.019	45.852	19.732	2.944	899
920	1.479	34.121	1.182	27.774	17.022	45.856	19.807	2.988	919
940	1.480	34.121	1.172	27.776	17.024	45.859	19.011	2.933	939
960	1.481	34.121	1.165	27.778	17.027	45.862	19.178	2.878	959
980	1.487	34.121	1.157	27.778	17.028	45.863	19.500	2.924	979
1000	1.493	34.121	1.152	27.780	17.029	45.865	19.784	2.969	999
1020	1.499	34.121	1.147	27.781	17.031	45.866	19.069	3.015	1019
1040	1.507	34.121	1.143	27.782	17.032	45.868	19.387	3.061	1039
1060	1.516	34.121	1.140	27.782	17.032	45.868	19.794	3.108	1059
1080	1.527	34.121	1.139	27.783	17.033	45.869	19.165	3.155	1079
1100	1.539	34.121	1.139	27.783	17.033	45.869	19.627	3.202	1099
1120	1.550	34.121	1.138	27.783	17.033	45.870	19.074	3.250	1119
1140	1.561	34.121	1.137	27.783	17.033	45.870	19.523	3.297	1139
1160	1.572	34.121	1.135	27.784	17.034	45.871	19.904	3.347	1159
1180	1.584	34.121	1.135	27.784	17.035	45.871	19.375	3.396	1179
1200	1.597	34.121	1.135	27.784	17.034	45.871	19.867	3.445	1199
1220	1.598	34.121	1.135	27.784	17.034	45.871	19.895	3.443	1219

## WICKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO4	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	9.120	34.131	6.79	104.5	10.5	0.84	7.4	0.10	9.120	25.604	14.471	42.948		1
19	9.165	34.134	6.79	104.3	10.4	0.84	7.5	0.10	9.160	25.612	14.504	42.989		19
39	9.610	34.134	6.79	102.9	11.4	0.90	7.4	0.15	9.601	25.716	14.614	43.119		39
119	9.934	34.129	6.23	95.4	9.5	0.91	10.0	0.03	9.922	26.019	14.896	43.192		119
159	9.718	34.142	6.08	91.4	19.0	1.05	13.6	0.01	9.703	26.164	15.279	43.811		159
219	9.166	34.172	5.93	83.4	24.7	1.21	16.5	0.01	9.144	26.445	15.152	43.856		219
294	7.723	34.186	4.54	67.1	19.1	1.65	23.2	0.00	7.245	26.595	15.534	44.736		294
375	5.720	34.149	3.25	46.3	61.4	2.22	31.2	0.01	5.687	26.761	15.783	44.436		375
500	4.936	34.111	2.26	31.5	92.8	2.61	36.8	0.00	4.796	26.906	15.972	44.635		500
594	4.176	34.168	1.95	21.4	97.7	2.92	40.1	0.00	4.131	27.010	16.199	44.783		594
696	3.958	34.150	1.05	14.3	112.7	2.95	42.2	0.00	3.907	27.129	16.228	44.932		696
793	3.691	34.214	0.74	10.0	123.1	3.04	43.7	0.00	3.624	27.198	16.121	45.018		793
899	3.192	34.279	0.42	5.7	135.3	3.15	44.9	0.00	3.119	27.279	16.417	45.147		899
998	3.179	34.323	0.32	4.3	144.8	3.18	45.4	0.00	3.109	27.335	16.493	45.223		998
1245	2.732	34.425	0.27	3.6	161.4	3.20	45.8	0.00	2.645	27.458	16.629	45.391		1245
1491	2.377	34.501	0.45	5.9	171.4	3.16	45.6	0.00	2.276	27.550	16.740	45.519		1491
1744	2.121	34.556	0.95	11.1	177.9	3.08	44.6	0.00	2.002	27.616	16.820	45.613		1744
1996	1.932	34.594	1.29	16.9	193.0	3.01	43.5	0.00	1.795	27.662	16.877	45.680		1996
2492	1.692	34.637	2.00	25.9	193.1	2.87	41.5	0.00	1.515	27.718	16.948	45.764		2492
2991	1.537	34.662	2.66	34.2	178.3	2.73	39.6	0.00	1.316	27.752	16.992	45.820		2991
3493	1.481	34.676	3.26	39.2	175.3	2.63	38.5	0.00	1.211	27.771	17.017	45.849		3493
3960	1.480	34.684	3.22	41.2	176.5		37.9	0.00	1.159	27.791	17.030	45.865		3960
4428	1.518	34.686	3.33	42.6	179.1		37.8	0.00	1.142	27.793	17.033	45.869		4428
5094	1.596	34.687	3.34	42.7	180.0	2.61	37.7	0.02	1.135	27.795	17.035	45.911		5094

# MARATHON 2 STA. 58



NEW THOMAS WASHINGTON MARATHON LEG 11 STATION 77

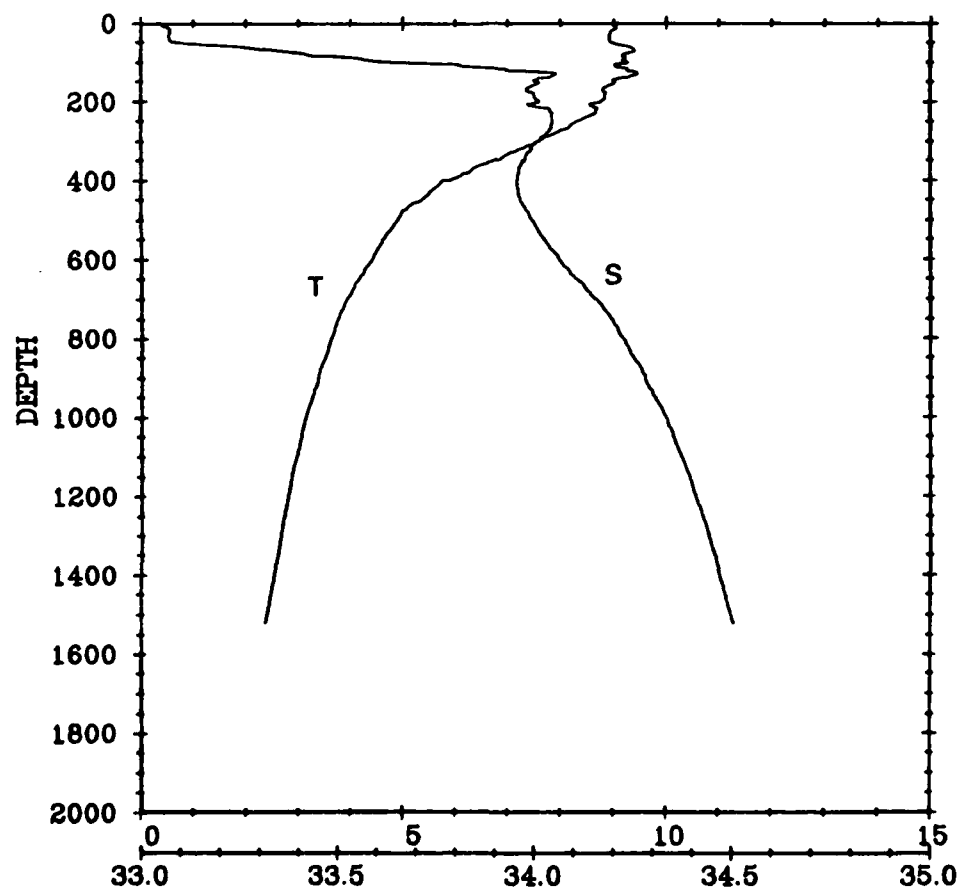
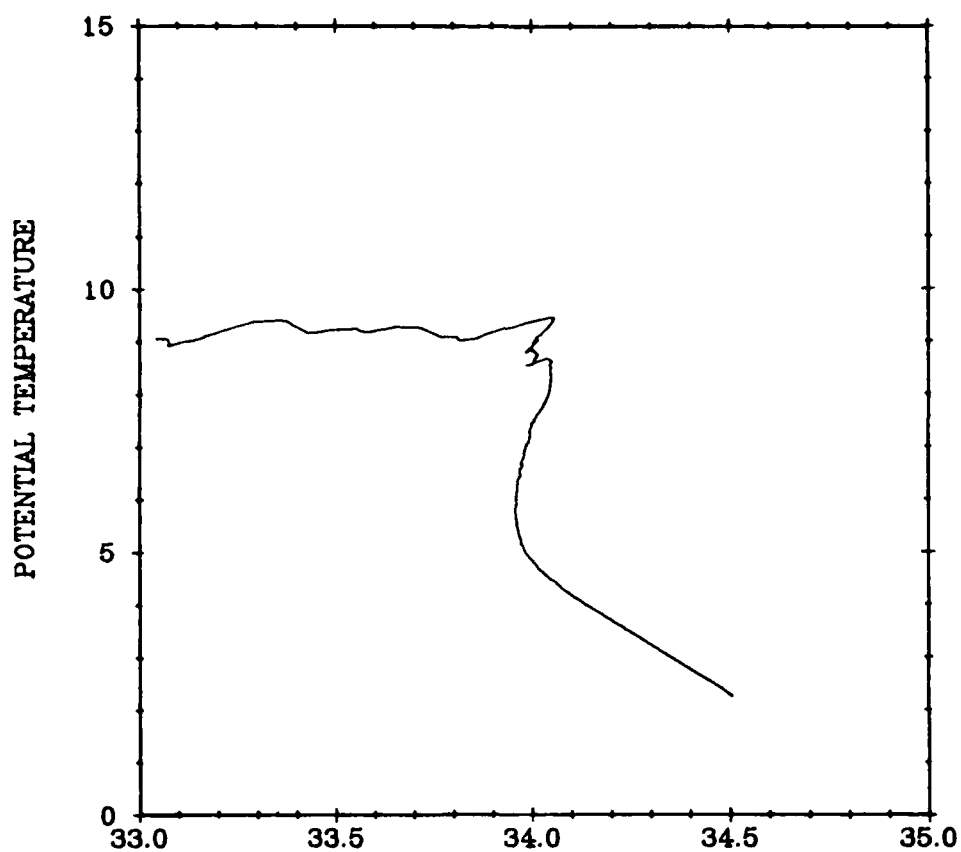
LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
41 18.3N	121 59.1W	5	23	84	1254	5000	100	10	22.2	6.1	1011.0

STD DATA		SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
PRESS	TEMP								
DB	DEG C		DEG C				CG TUN		M
1	9.145	33.054	9.145	25.589	34.468	42.947	219.870	0.000	0
21	8.979	33.071	8.976	25.612	34.495	42.985	219.916	0.048	19
41	8.828	33.078	8.924	25.625	34.511	43.004	219.912	0.095	39
61	8.680	33.226	9.224	25.695	34.556	43.145	220.159	1.140	59
81	8.444	33.427	9.205	25.849	34.716	43.192	220.559	0.185	79
101	8.214	33.674	9.163	26.054	34.920	43.195	220.519	0.227	99
121	8.123	34.025	9.177	26.141	35.208	43.584	121.044	0.319	119
141	8.159	34.025	9.178	26.181	35.264	43.764	121.137	0.413	139
161	8.135	34.045	9.170	26.178	35.376	43.892	120.999	0.485	159
181	7.995	34.110	9.167	26.560	35.492	44.107	121.669	0.562	179
201	6.750	33.974	9.179	26.449	35.621	44.197	121.439	0.615	199
221	5.909	33.957	9.175	26.744	35.758	44.101	121.177	0.705	219
241	5.174	33.965	9.137	26.815	35.855	44.494	121.731	0.771	239
261	4.410	33.991	9.172	26.891	35.954	44.504	121.410	0.810	259
281	4.449	34.062	9.124	27.000	36.086	44.758	121.840	0.949	279
301	3.963	34.150	9.122	27.119	36.228	44.831	99.462	1.054	299
321	3.647	34.220	9.150	27.207	36.331	45.049	91.915	1.150	319
341	3.185	34.277	9.122	27.278	36.416	45.146	85.491	1.219	339
361	3.150	34.329	9.091	27.342	36.492	45.233	79.708	1.322	359
381	2.974	34.359	9.099	27.390	36.548	45.299	75.499	1.399	379
401	2.810	34.404	9.079	27.434	36.601	45.359	71.605	1.473	399
421	2.659	34.419	9.080	27.474	36.648	45.413	68.165	1.543	419
441	2.447	34.457	9.083	27.508	36.689	45.450	65.093	1.609	439
461	2.412	34.493	9.081	27.540	36.729	45.507	62.147	1.673	459
481	2.157	34.504	9.084	27.554	36.745	45.525	60.392	1.696	479

NISKIN BOTTLE DATA		SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
DEPTH	TEMP													
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
3	9.115	33.063	5.78	103.9	11.5	0.90	7.8	0.11	9.115	25.584	34.460	42.947		3
52	8.195	33.159	5.73	103.4	9.4	0.88	7.5	0.14	9.189	25.647	34.519	43.001		52
101	9.232	33.711	6.06	93.5	9.6	0.86	10.3	0.02	9.221	26.074	34.936	43.404		101
142	9.176	34.035	5.79	99.4	17.9	1.06	13.1	0.01	9.161	26.337	35.197	43.669		142
163	8.789	33.993	5.86	99.7	18.4	1.04	13.2	0.01	8.772	26.358	35.236	43.724		164
203	8.514	34.012	5.53	94.1	22.5	1.11	15.3	0.01	8.593	26.409	35.294	43.789		204
245	8.148	34.045	4.98	75.5	28.9	1.37	18.9	0.00	8.323	26.476	35.374	43.879		246
297	7.503	34.002	4.59	68.2	16.2	1.60	22.3	0.00	7.474	26.566	35.503	44.040		299
395	5.928	33.959	3.42	49.0	57.3	2.14	30.0	0.00	5.894	26.743	35.756	44.168		397
492	4.893	33.994	2.30	32.1	77.3	2.58	35.2	0.00	4.854	26.894	35.957	44.618		495
590	4.444	34.058	1.63	22.5	93.7	2.79	39.4	0.00	4.399	26.995	36.080	44.761		594
687	3.980	34.147	0.98	13.4	110.0	2.99	42.1	0.00	3.930	27.115	36.222	44.825		692
789	3.651	34.219	0.64	8.7	122.3	3.28	43.6	0.00	3.595	27.206	36.310	45.048		794
879	3.405	34.271	0.43	5.8	132.1	3.45	44.6	0.00	3.343	27.273	36.409	45.139		880
984	3.152	34.326	0.34	4.6	141.4	3.28	45.2	0.00	3.094	27.338	36.487	45.229		992
1216	2.770	34.415	0.26	3.5	155.1		45.7	0.00	2.687	27.446	36.515	45.375		1227
1521	2.360	34.503	0.46	6.0	170.9		45.5	0.00	2.257	27.553	36.744	45.524		1537



MARATHON 2 STA. 59



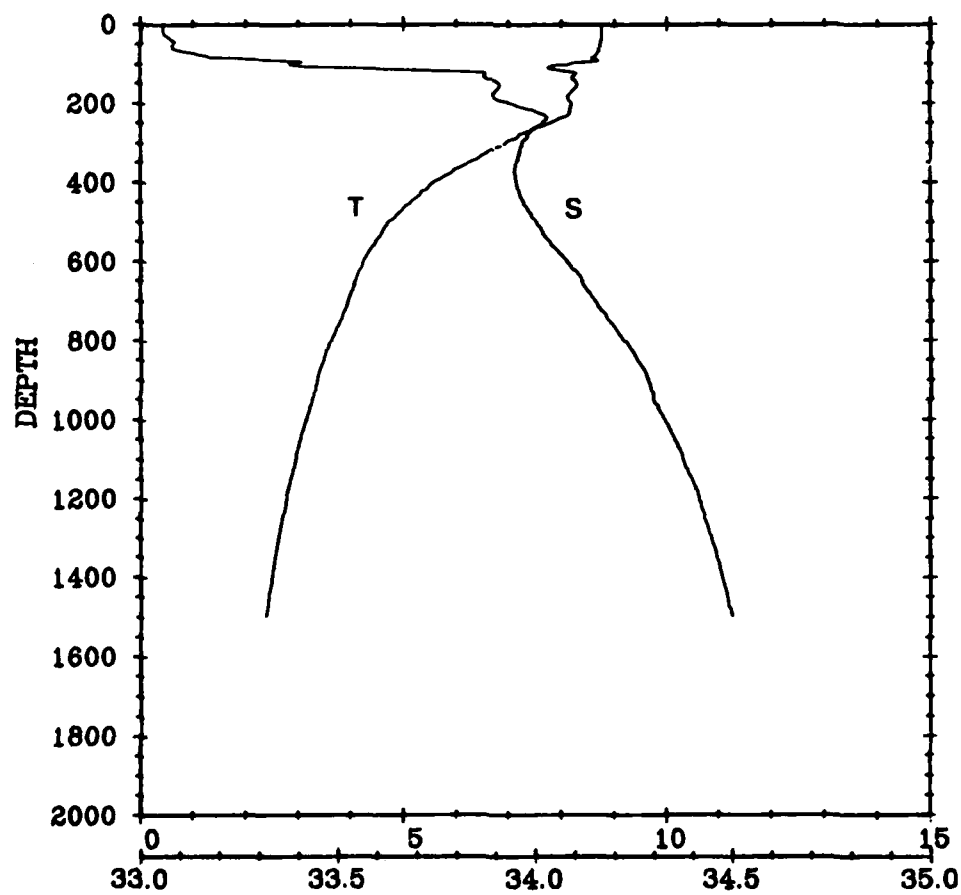
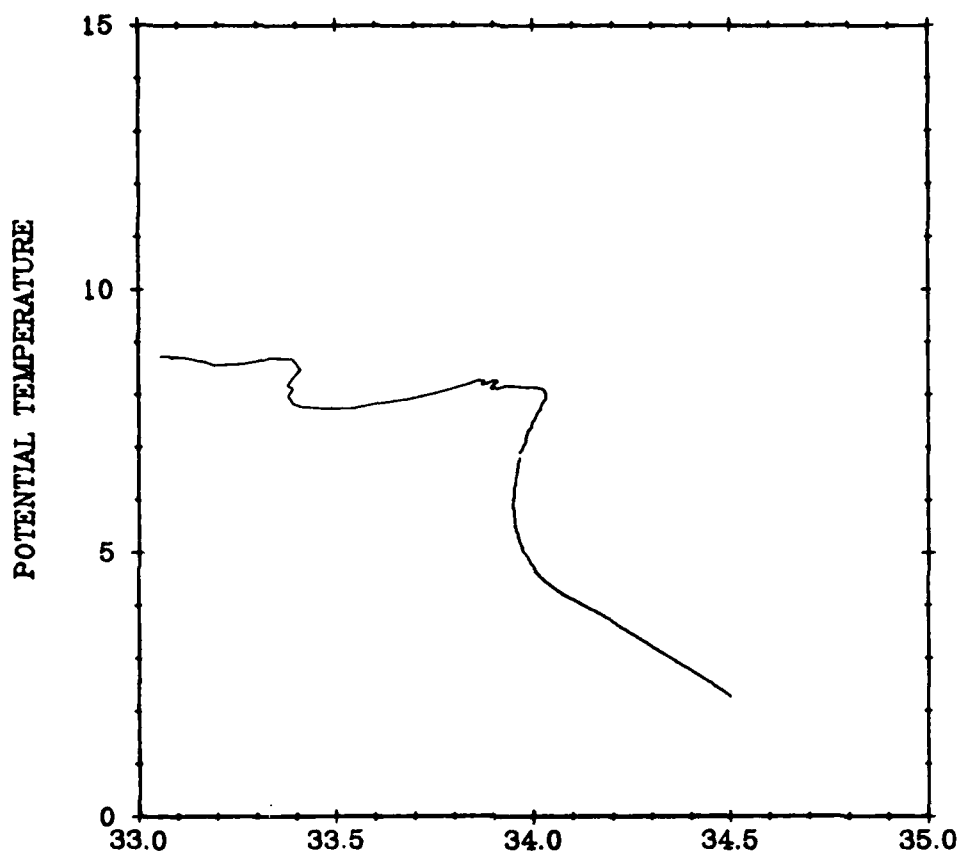
R V THOMAS WASHINGTON MARATHON LED II STATION 42

LATITUDE	LONGITUDE	MO	DAY	HR	START TIME	BATH	WIND	SPEED	AIR TEMP	WET BULB	BAROM
					GMT	°C	DIR	KT	°C	°C	MB
42 07' AN	151 54' W	5	24	94	948	111	280	15	4.4	7.9	1011.8

STD DATA		SALINITY	POT TEMP °C	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH M
PRESS DB	TEMP °C								
0	9.746	33.181	9.746	25.517	14.531	43.131	234.413	1.047	0
10	9.749	33.183	9.747	25.516	14.531	43.132	234.444	1.047	10
20	9.741	33.181	9.737	25.514	14.547	43.149	233.422	1.044	20
30	9.715	33.180	9.719	25.508	14.563	43.163	234.114	1.047	30
40	9.643	33.175	9.615	25.747	14.643	43.143	233.120	1.135	40
50	9.617	33.189	9.613	25.919	14.891	43.111	233.117	1.229	50
60	9.619	33.174	9.613	25.374	15.276	43.185	165.911	1.321	60
70	9.611	33.183	9.611	26.415	15.122	43.136	163.988	1.474	70
80	9.789	34.118	9.763	26.518	15.461	43.190	153.117	1.483	80
90	9.667	33.171	9.619	26.615	15.573	44.144	147.121	1.513	90
100	9.674	33.171	9.648	26.654	15.689	44.185	139.111	1.629	100
110	9.626	33.153	9.581	26.777	15.924	44.131	131.121	1.647	110
120	9.166	33.163	9.111	26.543	15.991	44.141	124.120	1.741	120
130	9.147	34.111	9.109	26.926	15.187	44.154	112.115	1.821	130
140	9.241	34.115	9.217	27.117	16.125	44.125	101.115	1.914	140
150	9.445	34.143	9.414	27.117	16.225	44.129	101.114	1.919	150
160	9.642	34.219	9.585	27.217	16.331	45.111	91.128	1.914	160
170	9.114	34.241	9.296	27.294	16.422	45.114	84.119	1.921	170
180	9.168	34.124	9.199	27.116	16.485	45.225	85.118	1.915	180
190	9.168	34.111	9.199	27.394	16.114	45.105	75.115	1.911	190
200	9.111	34.111	9.694	27.444	16.611	45.111	61.127	1.915	200
210	9.618	34.142	9.615	27.479	16.655	45.122	61.111	1.921	210
220	9.111	34.111	9.411	27.114	16.697	45.111	64.115	1.991	220
230	9.111	34.111	9.292	27.544	16.734	45.111	61.119	1.994	230
240	9.114	34.111	9.212	27.549	16.740	45.119	61.265	1.992	240

NICKIN BOTTLE DATA		DIS O2 ML	O2 SAT	SIGMA T	POT	NO3	NO2	TRIT	POT TEMP °C	SIGMA T	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP °C												
2	9.744	5.32	101.1	25.1	2.95	9.5	1.11	9.714	25.519	14.530	43.114	234.413	
49	9.749	5.33	101.9	25.1	2.94	9.5	1.11	9.713	25.555	14.548	43.149	234.444	
101	9.619	5.39	100.0	25.1	2.92	9.7	1.10	9.609	25.928	14.124	43.229	233.422	
132	9.653	5.45	99.2	25.1	2.93	13.6	0.12	9.611	26.140	15.249	43.164	234.114	
157	9.288	5.71	91.9	25.1	2.74	13.3	0.11	9.211	26.178	15.280	43.140	233.120	
187	9.111	5.71	91.9	25.1	2.74	13.3	0.11	9.111	26.191	15.311	43.120	233.117	
248	9.123	4.80	71.9	25.1	2.71	21.1	0.11	9.113	26.516	15.458	43.146	234.114	
293	9.111	4.49	66.0	25.1	2.41	23.8	0.11	9.114	26.629	15.568	44.111	234.114	
393	9.610	3.13	44.5	25.1	2.21	31.9	0.11	9.611	26.779	15.817	44.114	234.114	
492	4.194	2.22	30.9	25.1	2.42	16.4	0.10	4.194	26.917	15.915	44.140	234.114	
595	4.210	1.43	19.7	25.1	2.85	40.4	0.10	4.195	27.116	16.131	44.111	234.114	
692	3.955	1.12	13.9	25.1	2.91	42.1	0.10	3.955	27.121	16.224	44.112	234.114	
806	3.540	0.55	7.4	25.1	2.10	44.1	0.10	3.493	27.214	16.161	45.119	234.114	
899	3.140	0.17	5.0	25.1	1.14	44.1	0.10	3.217	27.291	16.431	45.111	234.114	
999	3.126	0.10	4.0	25.1	1.17	45.2	0.10	3.057	27.350	16.510	45.111	234.114	
1221	2.120	0.27	3.5	25.1	1.00	45.6	0.10	2.617	27.461	16.611	45.114	234.114	
1495	2.175	0.44	3.9	25.1	1.72	45.1	0.10	2.214	27.550	16.740	45.111	234.114	

MARATHON 2 STA. 60



LATITUDE	LONGITUDE	NO. OF YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
42 53 2N	131 59 9W	5.24 94	1624	5149	20	12	19	19	1011.2

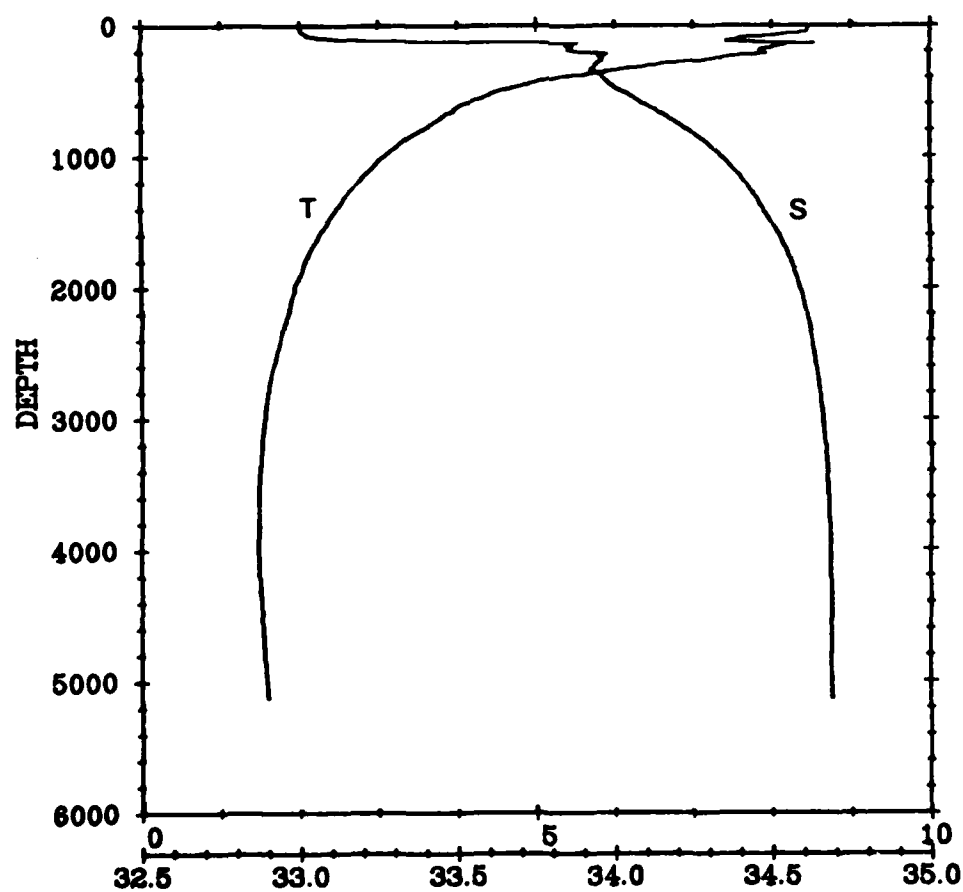
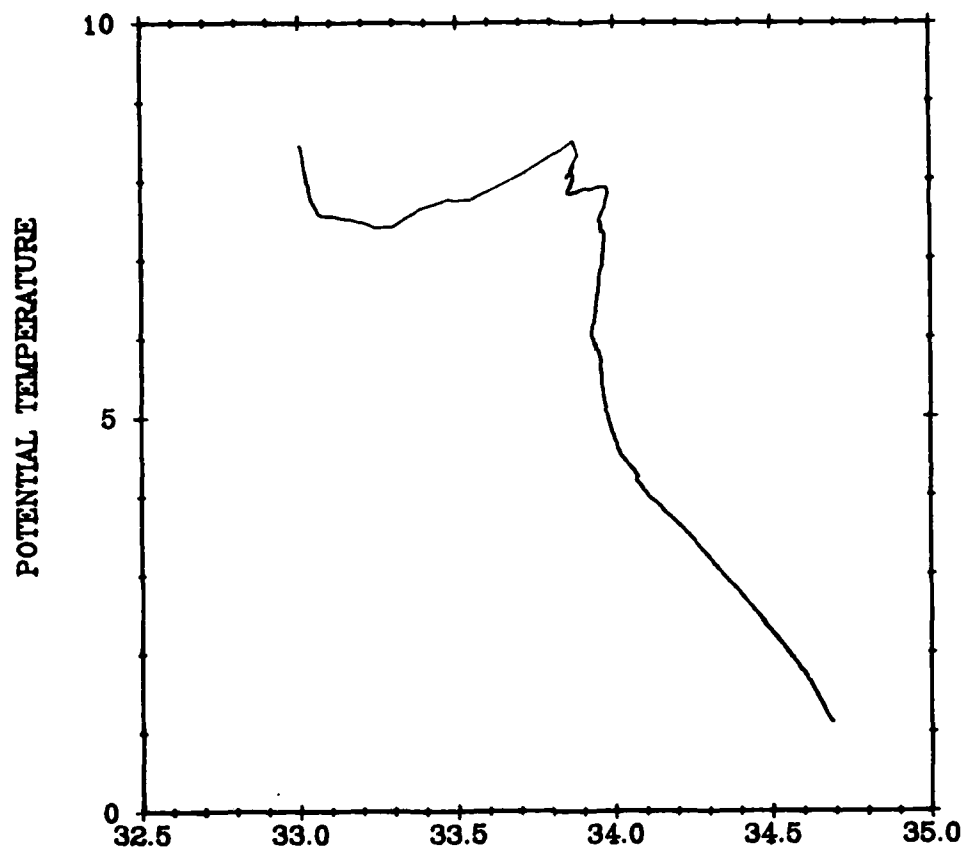
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				KG/CM		M
1	8.448	33.201	8.448	25.638	34.545	43.050	204.074	1.100	0
20	8.456	33.203	8.454	25.639	34.546	43.050	204.074	1.100	19
40	8.444	33.204	8.442	25.640	34.549	43.054	204.087	1.104	19
60	8.269	33.203	8.263	25.675	34.591	43.113	201.084	1.140	19
80	7.942	33.229	7.934	25.735	34.666	43.212	205.175	1.195	19
100	7.590	33.279	7.581	25.925	34.771	43.341	207.992	1.230	19
120	8.157	33.927	8.152	26.154	35.262	43.777	208.791	1.327	149
140	7.880	33.883	7.860	26.417	35.318	43.856	203.554	1.420	149
160	7.168	33.960	7.144	26.552	35.475	44.144	201.407	1.489	249
180	6.585	33.944	6.558	26.545	35.627	44.210	192.761	1.563	249
190	5.942	33.937	5.932	26.721	35.712	44.344	195.921	1.632	249
200	5.294	33.965	5.262	26.925	35.868	44.510	195.211	1.699	197
240	4.924	33.988	4.881	26.988	35.948	44.618	190.374	1.771	445
260	4.573	34.020	4.535	26.950	36.129	44.704	194.691	1.818	445
280	4.123	34.093	4.179	27.057	36.157	44.854	191.054	1.824	145
300	3.821	34.169	3.773	27.148	36.264	44.974	186.985	1.871	574
320	3.581	34.233	3.525	27.224	36.371	45.072	180.210	1.921	794
340	3.302	34.295	3.240	27.300	36.442	45.176	181.214	1.974	842
360	3.099	34.338	3.031	27.354	36.506	45.251	178.477	1.997	445
380	2.914	34.379	2.844	27.403	36.565	45.318	174.178	1.967	1189
400	2.734	34.425	2.673	27.447	36.617	45.379	171.157	1.937	1189
420	2.615	34.448	2.528	27.485	36.664	45.432	166.741	1.911	1189
440	2.499	34.473	2.409	27.517	36.700	45.474	164.075	1.872	1185
460	2.379	34.497	2.279	27.546	36.735	45.515	161.475	1.835	1484
480	2.266	34.522	2.159	27.576	36.772	45.558	159.814	1.798	1782
500	2.177	34.542	2.059	27.600	36.801	45.593	158.214	1.753	1682
520	2.096	34.560	1.965	27.622	36.828	45.623	156.709	1.709	1779
540	2.026	34.574	1.898	27.639	36.848	45.646	154.910	1.663	1479
560	1.943	34.596	1.808	27.655	36.859	45.672	152.009	1.616	1374
580	1.901	34.620	1.760	27.670	36.887	45.692	150.981	1.567	2074
600	1.863	34.627	1.712	27.679	36.899	45.706	150.250	1.514	2173
620	1.807	34.677	1.648	27.692	36.915	45.725	149.191	1.463	2271
640	1.745	34.624	1.593	27.701	36.927	45.740	148.491	1.416	2169
660	1.727	34.610	1.552	27.709	36.938	45.753	147.906	1.365	2467
680	1.682	34.637	1.499	27.719	36.950	45.769	147.140	1.312	2565
700	1.638	34.644	1.445	27.729	36.962	45.782	146.371	1.259	2563
720	1.605	34.643	1.405	27.735	36.971	45.794	145.817	1.205	2161
740	1.579	34.654	1.370	27.742	36.980	45.804	145.464	1.151	2859
760	1.559	34.658	1.340	27.747	36.987	45.813	145.191	1.096	2947
780	1.540	34.661	1.313	27.752	36.992	45.820	145.001	1.041	3755
800	1.521	34.665	1.284	27.757	36.999	45.828	144.730	0.985	3153
820	1.508	34.667	1.262	27.760	37.004	45.834	144.677	0.931	3251
840	1.496	34.670	1.240	27.764	37.009	45.840	144.564	0.875	3349
860	1.488	34.673	1.222	27.767	37.013	45.845	144.503	0.820	3446
880	1.480	34.675	1.204	27.770	37.017	45.850	144.508	0.764	3344
900	1.473	34.677	1.192	27.773	37.020	45.854	144.610	0.709	3442
920	1.476	34.679	1.179	27.775	37.023	45.858	144.640	0.654	3739
940	1.473	34.680	1.168	27.777	37.026	45.860	144.654	0.599	3937
960	1.479	34.682	1.160	27.779	37.028	45.863	145.029	0.541	3934
980	1.483	34.683	1.154	27.780	37.030	45.865	145.295	0.489	4032
1000	1.488	34.684	1.147	27.781	37.031	45.867	145.562	0.434	4129
1020	1.495	34.685	1.143	27.783	37.033	45.869	145.862	0.380	4226
1040	1.501	34.685	1.139	27.783	37.033	45.869	146.250	0.326	4324
1060	1.513	34.686	1.138	27.784	37.034	45.870	146.603	0.272	4421
1080	1.523	34.686	1.136	27.784	37.034	45.871	147.028	0.219	4519
1100	1.534	34.686	1.135	27.784	37.035	45.871	147.471	0.166	4615
1120	1.546	34.687	1.134	27.785	37.035	45.872	147.855	0.114	4712
1140	1.557	34.687	1.133	27.785	37.035	45.872	148.313	0.062	4809
1160	1.568	34.687	1.131	27.785	37.036	45.872	148.754	0.010	4907
1180	1.580	34.687	1.131	27.785	37.036	45.872	149.234	0.059	5004
1200	1.592	34.687	1.130	27.785	37.036	45.873	149.707	0.109	5101
1220	1.596	34.688	1.130	27.786	37.037	45.873	149.798	0.125	5133

## WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIST	O2 SAT	SiO2	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	8.395	32.994	6.85	103.1	14.1	0.97	9.1	0.10	8.185	25.634	34.544	43.052	1	
21	8.407	33.009	6.84	103.2	13.9	0.97	9.2	0.10	8.404	25.651	34.560	43.066	21	
54	8.277	33.014	6.85	103.0	14.2	0.99	9.3	0.11	8.272	25.675	34.589	43.112	54	
107	7.394	33.295	6.61	97.6	15.2	1.17	11.8	0.07	7.394	26.015	34.967	43.523	107	
153	6.092	33.957	6.35	91.1	18.2	1.05	13.6	0.01	6.077	26.313	35.284	43.852	153	
188	7.946	33.853	6.06	95.7	19.2	1.07	13.9	0.01	7.847	26.396	35.317	43.845	188	
291	6.788	33.953	4.47	60.3	40.5	1.74	24.2	0.01	6.761	26.626	35.597	44.171	291	
338	5.590	33.959	3.05	43.3	63.4	2.27	32.1	0.01	5.557	26.785	35.913	44.442	338	
515	4.700	34.024	2.11	29.3	82.5	2.52	37.3	0.00	4.691	26.921	35.993	44.562	515	
612	4.199	34.181	1.40	19.2	99.5	2.84	40.5	0.00	4.154	27.039	36.136	44.829	612	
695	3.964	34.156	1.01	13.8	110.8	2.95	42.2	0.00	3.914	27.134	36.247	44.955	700	
783	3.651	34.215	0.75	10.2	121.7	3.00	43.2	0.00	3.595	27.203	36.327	45.045	789	
890	3.421	34.269	0.54	7.3	129.1	3.08	44.1	0.00	3.359	27.268	36.404	45.113	887	
966	3.207	34.317	0.40	5.4	139.4	3.11	44.9	0.00	3.140	27.327	36.473	45.212	974	
1214	2.762	34.417	0.27	3.6	156.4	3.16	45.5	0.00	2.679	27.448	36.617	45.379	1225	
1461	2.447	34.496	0.37	4.9	168.1	3.13	45.5	0.00	2.349	27.512	36.718	45.494	1476	
1707	2.189	34.539	0.71	9.3	175.8	3.08	44.7	0.00	2.072	27.597	36.797	45.587	1726	
1955	1.999	34.579	1.11	14.4	181.2	3.01	43.6	0.00	1.854	27.646	36.857	45.659	1979	
2482	1.711	34.634	1.94	25.0	184.0	2.86	41.4	0.00	1.535	27.714	36.942	45.758	2514	
2982	1.552	34.660	2.59	33.3	176.9	2.71	39.6	0.00	1.332	27.749	36.989	45.815	3024	
3494	1.435	34.675	3.05	39.1	172.7	2.61	38.3	0.00	1.215	27.770	37.015	45.848	3518	
3983	1.430	34.682	3.24	41.4	172.6		37.7	0.00	1.156	27.779	37.028	45.864	4049	
4579	1.531	34.686	3.34	42.7	178.3		37.6	0.00	1.135	27.784	37.034	45.870	4662	
5133	1.596	34.688	3.37	43.1	179.0	2.50	37.4	0.00	1.130	27.786	37.036	45.873	5233	

# MARATHON 2 STA. 61



R V THOMAS WASHINGTON MARATHON LEG 11 STATION 52

LATITUDE	LONGITUDE	MO/DY YR	START TIME	BUTTON	WIND DIR	SPEED	AIR TEMP	WFT BULB	BAROM
			GMT	N		KT	DEG C	FEET	INB
43 21.0N	152 0.4W	5/24/84	2148	4742	10	16	20.0	10.0	30.1

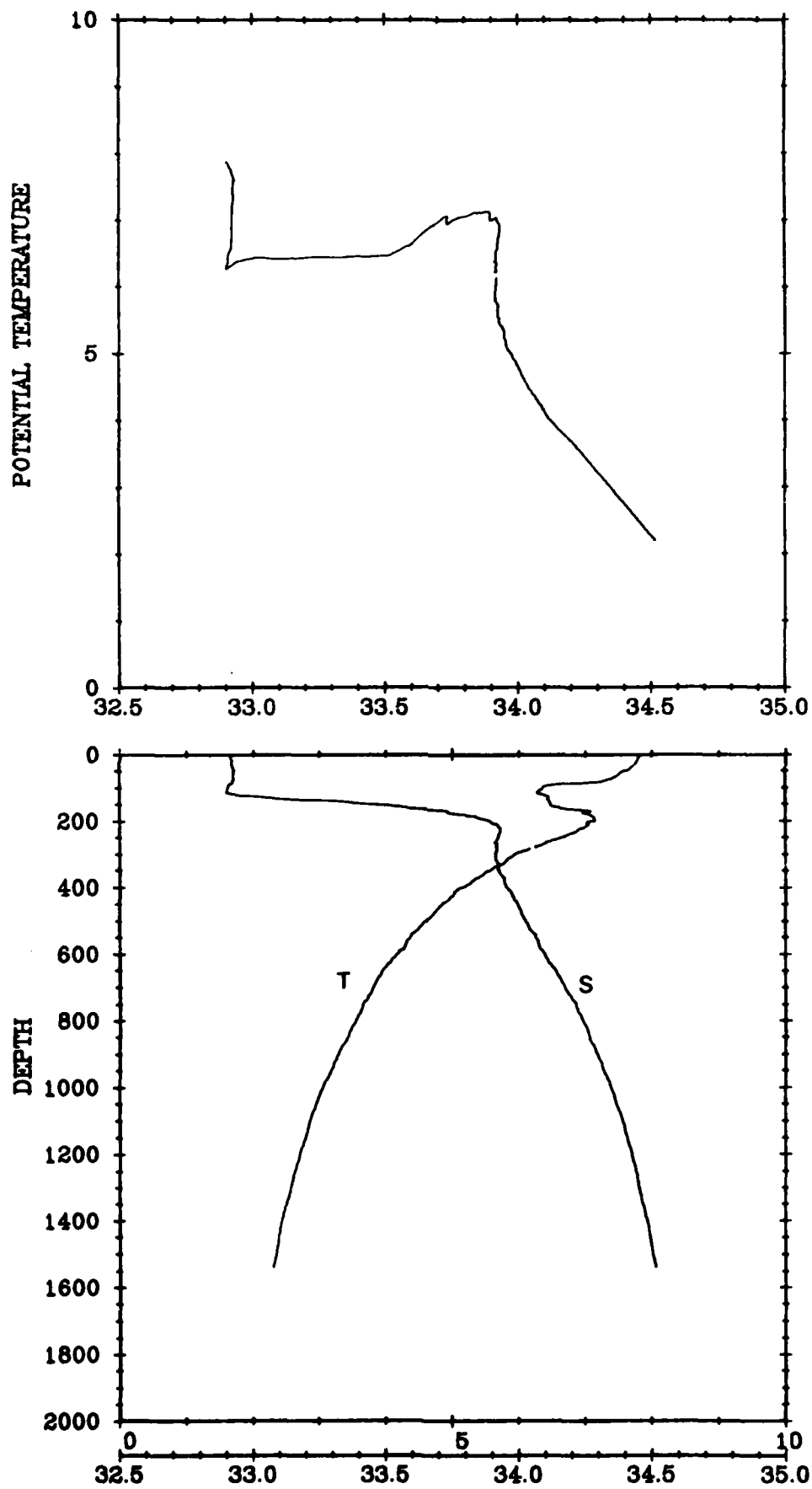
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA 4	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CT TUN		M
0	7.822	32.911	7.822	25.659	34.547	43.139	232.242	1.000	0
20	7.665	32.913	7.753	25.673	34.613	43.158	231.239	1.046	19
40	7.675	32.926	7.672	25.642	34.611	43.194	229.500	1.092	39
60	7.532	32.927	7.496	25.718	34.671	43.226	227.191	1.138	59
80	7.150	32.924	7.143	25.745	34.713	43.155	223.228	1.183	79
100	6.402	32.907	6.393	25.810	34.854	43.450	215.251	1.227	99
120	6.102	33.432	6.489	26.252	35.241	43.837	177.976	1.265	119
140	5.100	33.893	7.081	26.528	35.435	44.046	152.740	1.418	139
160	6.641	33.923	6.619	26.622	35.500	44.181	144.176	1.482	159
180	5.948	33.913	5.943	26.713	35.713	44.125	137.119	1.552	179
200	5.554	33.926	5.525	26.752	35.731	44.424	131.697	1.620	199
220	5.155	33.936	5.123	26.813	35.894	44.532	125.130	1.684	219
240	4.863	33.996	4.828	26.899	35.961	44.625	119.140	1.745	239
260	4.622	34.126	4.684	26.970	35.026	44.699	114.408	1.814	259
280	4.193	34.196	4.149	27.052	35.149	44.842	105.625	1.914	279
300	3.823	34.171	3.773	27.151	35.247	44.977	95.887	1.916	299
320	3.561	34.239	3.525	27.210	35.358	45.080	89.617	1.918	319
340	3.303	34.293	3.241	27.249	35.440	45.174	81.198	1.915	339
360	3.074	34.344	3.006	27.341	35.514	45.259	74.757	1.915	359
380	2.873	34.388	2.799	27.415	35.578	45.333	62.900	1.915	379
400	2.717	34.422	2.616	27.456	35.629	45.391	59.239	1.922	399
420	2.593	34.455	2.498	27.490	35.657	45.438	56.448	1.929	419
440	2.490	34.479	2.357	27.525	35.711	45.487	61.112	1.954	439
460	2.355	34.501	2.255	27.551	35.743	45.524	60.907	1.916	459
480	2.295	34.515	2.191	27.548	35.752	45.546	59.448	1.948	479

## WATSKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	D15 O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
0	7.865	32.918	6.95	103.4	16.1	1.38	12.3	0.12		7.865	25.659	34.594	43.134	0
50	7.663	32.910	7.01	103.9	16.1	1.38	12.5	0.12		7.658	25.698	34.642	43.191	50
100	6.181	32.910	7.10	100.6	17.6	1.40	12.7	0.21		6.144	25.858	34.845	43.471	100
150	6.415	33.059	6.80	98.0	18.6	1.41	13.2	0.18		6.404	25.969	34.849	43.471	150
200	6.983	33.701	5.97	87.3	23.7	1.44	15.6	0.22		6.957	26.414	35.123	43.956	200
250	7.123	33.894	4.99	79.3	33.3	1.54	21.1	0.22		7.074	26.549	35.109	44.073	250
300	6.547	33.921	4.61	57.0	41.4	1.75	24.2	0.01		6.545	26.610	35.512	44.196	300
350	5.903	33.912	3.01	55.9	51.8	2.21	28.1	0.01		5.882	26.708	35.721	44.135	350
400	5.065	33.955	2.60	36.3	73.3	2.47	34.8	0.01		5.033	26.851	35.935	44.552	400
450	4.404	34.128	1.94	26.9	88.1	2.59	37.9	0.01		4.545	26.953	35.010	44.704	450
500	4.135	34.103	1.30	17.8	103.8	2.38	40.8	0.01		4.091	27.063	35.263	44.859	500
550	3.791	34.181	0.89	12.1	117.3	2.39	42.5	0.01		3.741	27.161	35.278	44.989	550
600	3.551	34.242	0.62	8.4	126.8	3.07	43.7	0.01		3.494	27.234	35.363	45.085	600
650	3.264	34.301	0.39	5.2	138.6	3.13	44.6	0.01		3.271	27.309	35.452	45.198	650
700	3.047	34.351	0.14	4.5	146.5	3.16	45.0	0.01		2.978	27.369	35.523	45.270	700
750	2.691	34.428	0.10	4.0	159.5		45.3	0.01		2.610	27.463	35.636	45.400	750
800	2.297	34.516	0.55	7.2	172.7		45.0	0.01		2.493	27.568	35.752	45.546	800

# MARATHON 2 STA. 62



R/V THOMAS WASHINGTON MARATHON LED 11 STATION 61

LATITUDE LONGITUDE MO DY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
43 49 TN 151 59 W 8/25/84 618 5639 20 12 2 2 5.1 1001.1

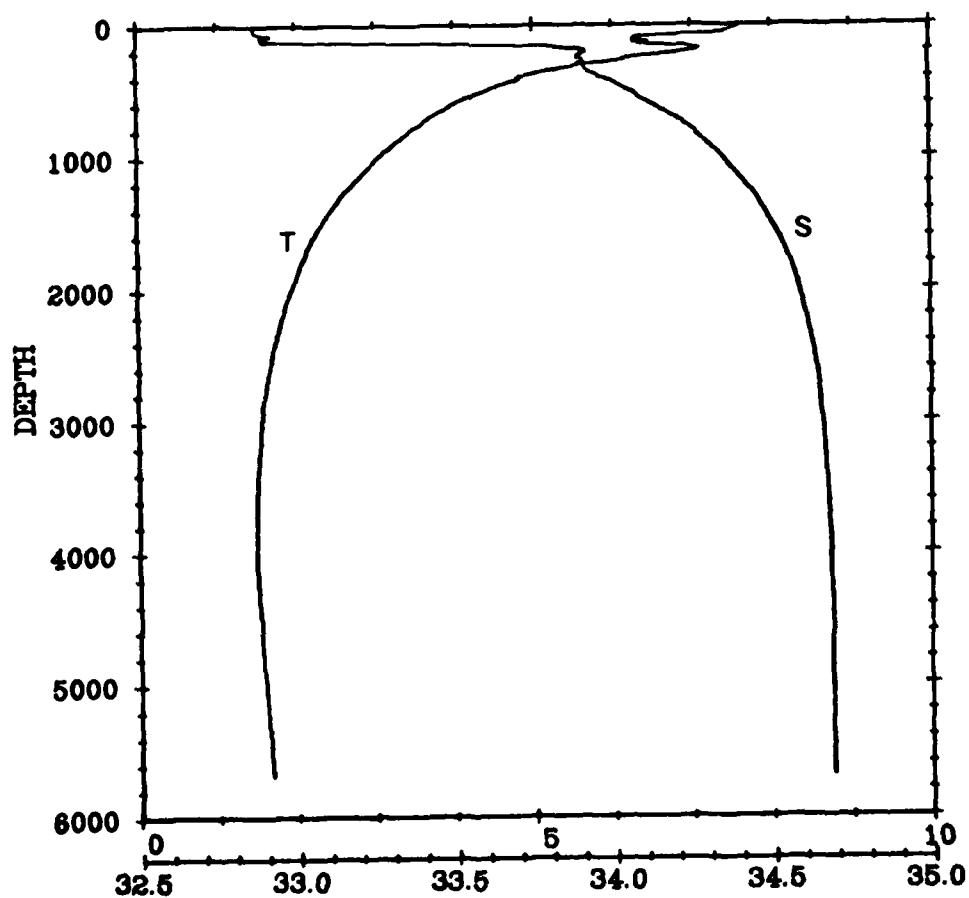
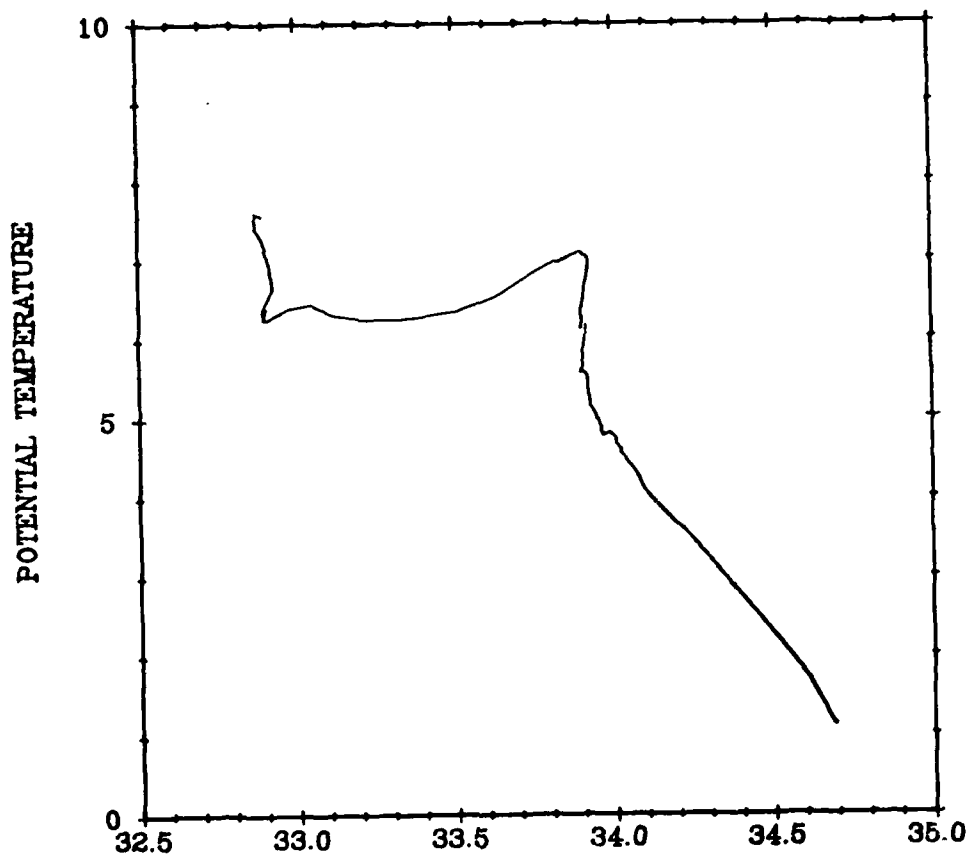
DEPTH	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C	DEG C		DEG C						M
1	7.559	32.973	7.559	25.660	34.607	43.190	232.000	1.000		1
2	7.592	32.969	7.592	25.661	34.610	43.193	232.224	0.046		19
4	7.476	32.971	7.472	25.678	34.631	43.190	232.941	0.091		79
6	7.122	32.985	7.126	25.710	34.671	43.216	228.129	0.139		59
8	6.754	32.969	6.747	25.806	34.793	43.393	219.251	0.183		79
10	6.326	32.995	6.319	25.851	34.859	43.468	215.242	0.227		99
12	6.456	33.544	6.493	26.342	35.332	43.923	169.436	0.323		149
20	7.228	33.914	7.010	26.562	35.522	44.256	149.465	0.403		179
25	6.271	33.895	6.249	26.648	35.645	44.243	141.517	0.475		249
30	5.955	33.900	5.940	26.728	35.754	44.379	134.405	0.544		279
35	5.238	33.904	5.190	26.802	35.849	44.496	127.738	0.612		349
40	4.845	33.964	4.814	26.875	35.941	44.504	121.017	0.672		379
45	4.646	34.017	4.612	26.939	36.015	44.595	115.274	0.731		445
50	4.421	34.053	4.394	26.991	36.079	44.761	110.506	0.789		496
60	4.010	34.121	3.957	27.090	36.197	44.998	101.720	0.894		595
70	3.703	34.195	3.664	27.181	36.302	45.015	93.660	0.991		694
80	3.466	34.255	3.400	27.252	36.385	45.110	87.108	1.090		793
90	3.266	34.300	3.204	27.309	36.451	45.197	82.472	1.167		891
100	3.066	34.343	2.999	27.361	36.505	45.260	77.743	1.247		990
110	2.913	34.379	2.838	27.404	36.566	45.319	74.018	1.323		1149
120	2.747	34.415	2.666	27.448	36.618	45.382	70.189	1.395		1188
130	2.592	34.450	2.505	27.490	36.669	45.437	66.326	1.463		1246
140	2.469	34.474	2.375	27.520	36.708	45.480	63.596	1.528		1385
150	2.332	34.498	2.252	27.549	36.741	45.522	61.094	1.591		1484
160	2.244	34.521	2.137	27.577	36.775	45.561	59.615	1.650		1582
170	2.151	34.541	2.037	27.601	36.804	45.595	58.316	1.708		1681
180	2.077	34.557	1.956	27.620	36.827	45.622	57.924	1.764		1779
190	2.011	34.571	1.891	27.637	36.848	45.646	57.527	1.818		1878
200	1.949	34.584	1.833	27.653	36.867	45.669	57.229	1.871		1976
210	1.890	34.596	1.747	27.668	36.885	45.691	57.015	1.922		2074
220	1.839	34.606	1.687	27.680	36.901	45.709	56.814	1.973		2172
230	1.785	34.616	1.626	27.692	36.916	45.727	56.681	2.022		2271
240	1.741	34.623	1.574	27.702	36.929	45.743	56.557	2.071		2369
250	1.690	34.632	1.516	27.714	36.944	45.761	56.442	2.119		2467
260	1.639	34.639	1.475	27.722	36.954	45.773	56.333	2.166		2565
270	1.622	34.644	1.431	27.729	36.964	45.785	56.258	2.212		2663
280	1.598	34.648	1.398	27.735	36.971	45.794	56.194	2.258		2761
290	1.574	34.651	1.365	27.741	36.980	45.804	56.167	2.304		2859
300	1.555	34.657	1.337	27.747	36.986	45.812	56.111	2.349		2957
310	1.537	34.661	1.310	27.752	36.993	45.820	56.061	2.394		3055
320	1.529	34.663	1.292	27.755	36.997	45.825	56.018	2.439		3153
330	1.514	34.666	1.268	27.759	37.002	45.832	55.987	2.484		3250
340	1.504	34.668	1.248	27.762	37.005	45.837	55.924	2.529		3348
350	1.489	34.672	1.223	27.767	37.012	45.844	55.889	2.574		3446
360	1.482	34.674	1.206	27.770	37.015	45.849	55.809	2.618		3544
370	1.476	34.676	1.190	27.772	37.020	45.853	55.641	2.663		3642
380	1.475	34.678	1.179	27.775	37.023	45.857	55.761	2.708		3739
390	1.473	34.680	1.166	27.777	37.025	45.861	55.832	2.753		3837
400	1.474	34.681	1.156	27.778	37.028	45.865	55.916	2.798		3934
410	1.490	34.682	1.151	27.780	37.029	45.865	55.918	2.843		4031
420	1.494	34.683	1.143	27.781	37.031	45.867	55.968	2.888		4129
430	1.492	34.684	1.140	27.782	37.032	45.869	55.884	2.934		4226
440	1.500	34.685	1.136	27.783	37.034	45.870	55.800	2.980		4323
450	1.509	34.685	1.134	27.783	37.034	45.870	55.606	3.025		4420
460	1.520	34.685	1.133	27.783	37.034	45.870	47.046	3.073		4516
470	1.531	34.686	1.132	27.784	37.035	45.871	47.420	3.120		4615
480	1.542	34.686	1.130	27.784	37.035	45.872	47.865	3.168		4712
490	1.554	34.686	1.130	27.784	37.035	45.872	48.330	3.216		4809
500	1.565	34.686	1.128	27.784	37.035	45.872	48.779	3.265		4906
510	1.577	34.687	1.128	27.785	37.036	45.873	49.180	3.314		5003
520	1.589	34.687	1.127	27.785	37.036	45.873	49.552	3.363		5100
530	1.601	34.687	1.126	27.785	37.036	45.873	50.127	3.413		5197
540	1.614	34.687	1.126	27.785	37.036	45.873	50.523	3.463		5294
550	1.629	34.687	1.127	27.785	37.036	45.873	51.139	3.514		5391
560	1.641	34.687	1.126	27.785	37.036	45.873	51.540	3.566		5487
570	1.654	34.687	1.126	27.785	37.036	45.873	52.143	3.618		5584
580	1.666	34.687	1.124	27.785	37.037	45.873	52.610	3.670		5681
590	1.667	34.688	1.125	27.786	37.037	45.874	52.591	3.672		5685

WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TURBIN	DEG C				DB
1	7.564	32.977	7.04	104.1	17.2	1.09	10.6	0.11	7.564	25.669	34.619	43.173		1
48	7.494	32.976	7.04	103.9	17.2	1.09	10.6	0.11	7.489	25.678	34.631	43.189		48
100	6.716	32.925	6.99	100.8	19.1	1.17	11.7	0.20	6.497	25.851	34.850	43.450		100
134	6.478	33.024	6.83	99.5	19.3	1.17	12.6	0.24	6.466	25.933	34.911	43.512		134
200	7.067	33.909	5.14	75.6	33.8	1.53	21.2	0.21	7.019	26.553	35.511	44.073		201
300	5.546	33.870	3.86	54.7	54.2	2.07	29.1	0.00	5.521	26.724	35.736	44.387		302
399	4.956	33.842	2.44	34.1	76.6	2.51	35.6	0.00	4.925	26.877	35.917	44.594		402
496	4.405	34.157	1.55	22.8	93.6	2.77	39.1	0.00	4.363	26.998	36.094	44.767		499
502	3.969	34.132	1.14	15.6	109.2	2.92	41.7	0.00	3.924	27.104	36.211	44.915		506
702	3.594	34.206	0.80	10.9	120.2	3.02	43.0	0.00	3.634	27.191	36.313	45.010		707
800	3.434	34.264	0.59	8.0	129.7	3.07	44.2	0.00	3.378	27.262	36.397	45.125		807
896	3.228	34.311	0.41	5.5	138.2	3.12	44.7	0.00	3.165	27.320	36.468	45.252		894
995	3.025	34.359	0.33	4.4	148.2	3.16	45.1	0.00	2.917	27.379	36.536	45.384		994
1244	2.641	34.442	0.12	4.2	160.7	3.17	45.4	0.00	2.557	27.479	36.634	45.422		1254
1492	2.345	34.503	0.09	6.4	170.3	3.14	45.2	0.00	2.244	27.554	36.745	45.527		1506
1749	2.125	34.550	0.01	10.4	175.8	3.17	44.5	0.00	2.006	27.611	36.814	45.607		1768
1991	1.957	34.585	1.18	13.3	179.5	3.00	43.5	0.00	1.920	27.653	36.857	45.668		2014
2485	1.709	34.631	1.93	24.9	180.0	2.97	41.4	0.00	1.692	27.712	36.940	45.757		2517
2988	1.559	34.659	2.60	33.4	180.6	2.73	39.4	0.00	1.337	27.748	36.998	45.813		3031
3484	1.485	34.675	3.08	39.4	170.1	2.65	38.2	0.00	1.215	27.770	37.015	45.848		3538
3972	1.475	34.683	3.12	42.5	170.4	2.59	37.6	0.00	1.153	27.780	37.030	45.865		4038
4464	1.514	34.685	3.14	42.7	171.1		37.5	0.00	1.133	27.783	37.033	45.870		4544
4948	1.570	34.686	3.18	43.2	172.9		37.3	0.00	1.128	27.784	37.035	45.872		5042
5684	1.667	34.687	3.19	43.3	174.2	2.59	37.4	0.00	1.125	27.785	37.036	45.873		5602



# MARATHON 2 STA. 63



LATITUDE 11 45 N LONGITUDE 112 10 W MO DY YR 1 25 84 START TIME 1112 BOTTOM M 5095 WIND DIR 170 SPEED 2 KT AIR TEMP DEG C 12 WET BULB DEG C 6.1 BAROM MB 1023.0

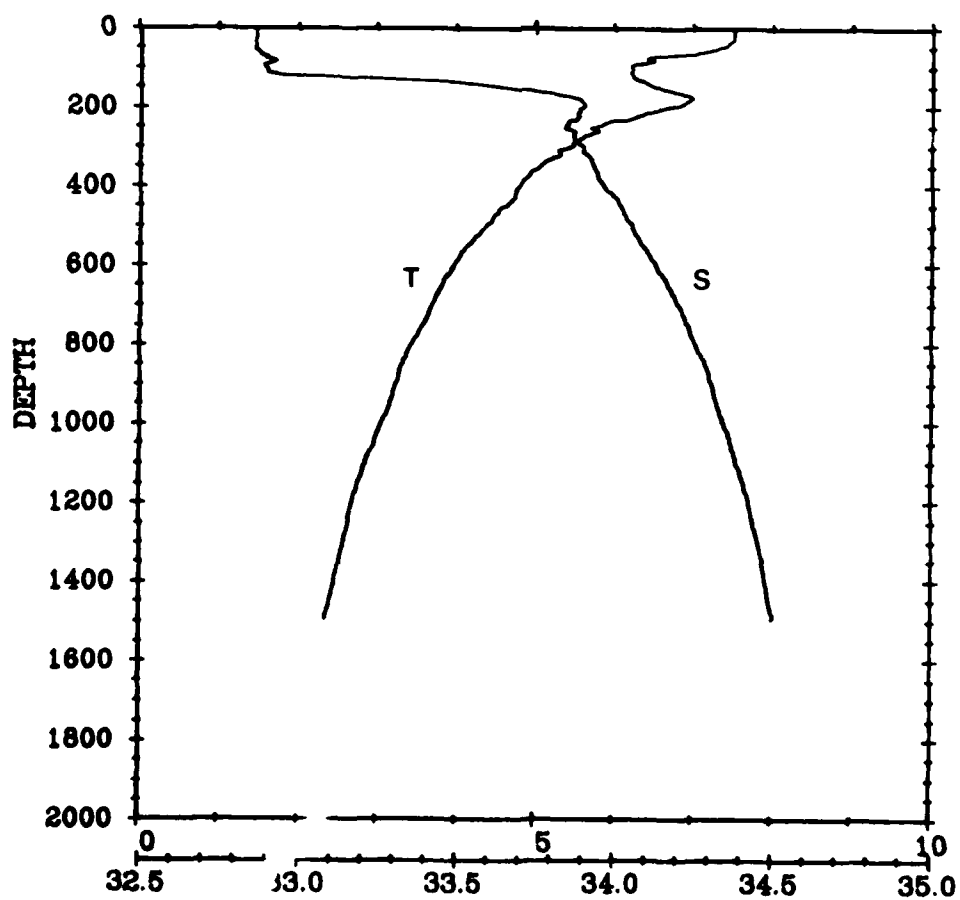
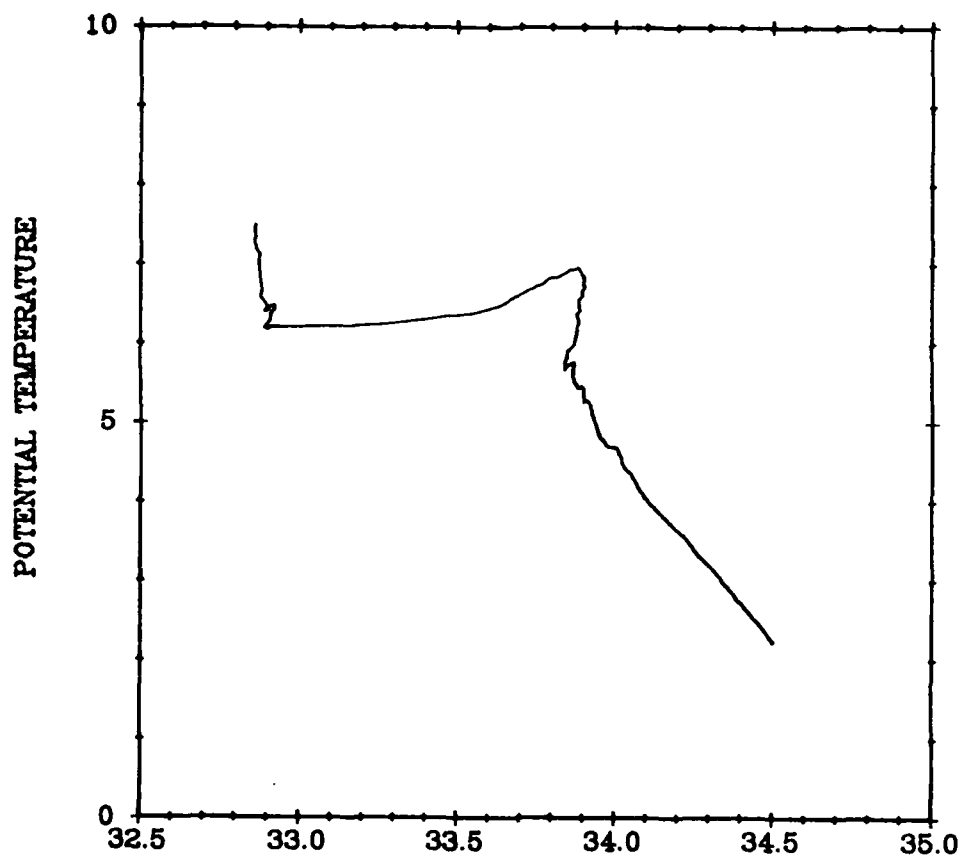
CTD DATA

DEPTH	PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
M	DB	DEG C		DEG C				CTD		M
0	1	12.496	32.362	12.496	25.567	34.520	43.177	211.314	0.000	0
1	2	12.497	32.363	12.497	25.568	34.521	43.178	211.316	0.046	19
2	3	12.421	32.361	12.417	25.577	34.534	43.195	210.956	0.193	19
3	4	12.193	32.370	12.179	25.731	34.703	43.279	225.121	0.138	59
4	5	12.482	32.305	12.475	25.838	34.838	43.447	225.147	0.182	79
5	6	12.211	32.395	12.225	25.363	34.875	43.489	224.108	0.225	99
6	7	12.511	32.527	12.514	26.404	35.391	43.932	263.107	0.320	149
7	8	12.115	32.396	12.110	25.590	35.565	44.143	246.665	0.357	198
8	9	12.791	32.348	12.770	26.671	35.691	44.311	239.224	0.469	248
9	10	12.407	32.393	12.413	26.750	35.787	44.423	232.135	0.537	297
10	11	12.167	32.393	12.140	26.825	35.880	44.512	225.136	0.601	347
11	12	12.795	32.364	12.765	26.880	35.949	44.604	227.455	0.663	396
12	13	12.615	32.316	12.605	26.944	36.028	44.697	225.140	0.721	446
13	14	12.384	32.352	12.347	26.994	36.092	44.766	227.114	0.779	496
14	15	12.959	32.128	12.926	27.130	36.203	44.912	220.745	0.883	545
15	16	12.595	32.198	12.546	27.184	36.305	45.021	213.114	0.980	594
16	17	12.449	32.254	12.393	27.253	36.387	45.104	217.196	1.071	643
17	18	12.240	32.303	12.179	27.312	36.457	45.194	211.965	1.165	691
18	19	12.161	32.341	12.093	27.360	36.514	45.260	217.887	1.235	740
19	20	12.350	32.394	12.286	27.413	36.577	45.333	213.164	1.311	789
20	21	12.590	32.425	12.510	27.461	36.634	45.398	217.198	1.381	838
21	22	12.575	32.451	12.489	27.492	36.671	45.441	216.174	1.449	886
22	23	12.479	32.477	12.385	27.521	36.709	45.484	213.161	1.514	935
23	24	12.142	32.510	12.042	27.552	36.744	45.525	210.933	1.576	983
24	25	12.128	32.500	12.027	27.553	36.746	45.528	210.731	1.583	1032

WICKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIST	O2 SAT	SIGMA T	POT	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
0	12.496	32.362	1.02	103.5	17.3	1.14	11.1	0.11	4.46	12.496	25.566	34.530	43.189	2
1	12.497	32.363	1.04	103.6	17.3	1.14	11.0	0.11		12.497	25.584	34.542	43.204	49
2	12.421	32.361	1.01	103.7	18.0	1.21	12.1	0.20		12.421	25.950	34.867	43.475	101
3	12.193	32.370	0.99	103.0	18.4	1.24	12.8	0.22	4.11	12.193	25.899	34.914	43.530	133
4	12.482	32.305	0.92	105.8	25.5	1.39	18.1	0.02		12.482	25.412	35.410	43.991	167
5	12.211	32.395	0.98	104.4	35.2	1.59	22.1	0.02		12.211	25.574	35.541	44.101	199
6	12.511	32.527	0.99	107.0	44.2	1.84	25.5	0.00		12.511	26.561	35.877	44.294	247
7	12.115	32.396	0.92	102.7	55.4	2.12	29.9	0.00		12.115	26.737	35.772	44.405	297
8	12.791	32.348	0.91	103.6	75.9	2.54	35.3	0.00	2.35	12.791	26.874	35.940	44.505	345
9	12.407	32.393	0.93	103.2	94.1	2.76	39.6	0.00	1.66	12.407	26.995	36.192	44.564	396
10	12.167	32.393	0.91	103.5	108.5	2.91	41.8	0.00	1.51	12.167	27.047	36.205	44.607	446
11	12.795	32.364	0.87	111.8	119.5	3.00	43.0	0.00	0.64	12.795	27.179	36.301	44.615	496
12	12.615	32.316	0.85	110.0	130.0	3.07	44.0	0.00	0.19	12.615	27.253	36.387	44.613	545
13	12.384	32.352	0.80	108.2	138.2	3.11	44.7	0.00	-0.05	12.384	27.313	36.458	44.615	594
14	12.959	32.128	0.41	105.5	144.7	3.13	45.0	0.00	-0.06	12.959	27.358	36.511	44.625	643
15	12.595	32.198	0.31	102.1	162.1		45.7	0.00		12.595	27.471	36.646	44.621	691
16	12.449	32.254	0.49	102.9	172.9		45.4	0.00		12.449	27.557	36.750	44.611	740

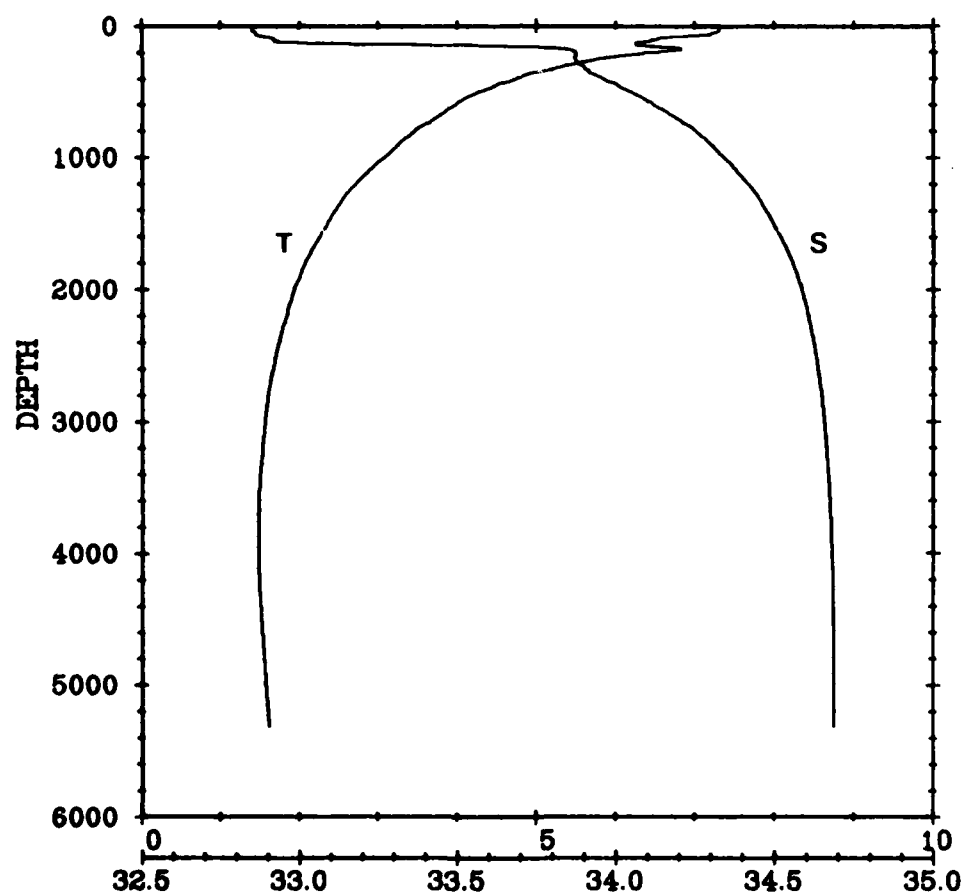
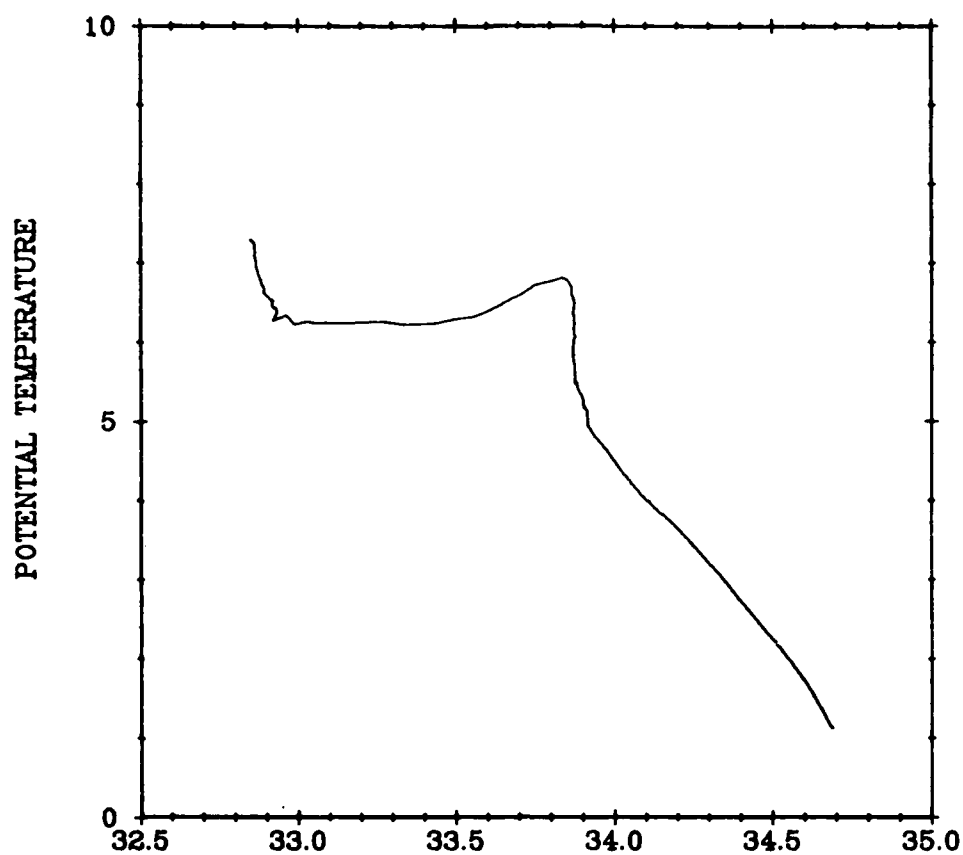
# MARATHON 2 STA. 64



LATITUDE	LONGITUDE	IC	BY	VR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAR M
					HH	M	DIR	KT	DEG F	DEG C	MB
44 40 N	152 1 W	5	25	94	1724	5100	210	5	59.1	5.2	1023.1

WTD DATA		SALINITY	POT TEMP DEG C	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
1	1.194	32.961	1.194	27.695	34.645	43.219	220.475	1.100	1
20	1.192	32.954	1.190	27.691	34.641	43.211	219.160	1.146	19
40	1.192	32.954	1.188	27.691	34.632	43.209	219.174	1.192	39
60	1.190	32.952	1.185	27.681	34.627	43.204	218.112	1.239	59
80	1.190	32.951	1.184	27.676	34.621	43.199	217.053	1.283	79
100	1.189	32.949	1.183	27.670	34.614	43.191	216.027	1.327	99
120	1.187	32.942	1.181	27.664	34.607	43.183	215.000	1.373	119
140	1.186	32.941	1.180	27.663	34.606	43.182	214.999	1.419	139
160	1.185	32.940	1.179	27.662	34.605	43.181	214.999	1.465	159
180	1.184	32.939	1.178	27.661	34.604	43.180	214.999	1.511	179
200	1.183	32.938	1.177	27.660	34.603	43.179	214.999	1.557	199
220	1.182	32.937	1.176	27.659	34.602	43.178	214.999	1.603	219
240	1.181	32.936	1.175	27.658	34.601	43.177	214.999	1.649	239
260	1.180	32.935	1.174	27.657	34.600	43.176	214.999	1.695	259
280	1.179	32.934	1.173	27.656	34.599	43.175	214.999	1.741	279
300	1.178	32.933	1.172	27.655	34.598	43.174	214.999	1.787	299
320	1.177	32.932	1.171	27.654	34.597	43.173	214.999	1.833	319
340	1.176	32.931	1.170	27.653	34.596	43.172	214.999	1.879	339
360	1.175	32.930	1.169	27.652	34.595	43.171	214.999	1.925	359
380	1.174	32.929	1.168	27.651	34.594	43.170	214.999	1.971	379
400	1.173	32.928	1.167	27.650	34.593	43.169	214.999	2.017	399
420	1.172	32.927	1.166	27.649	34.592	43.168	214.999	2.063	419
440	1.171	32.926	1.165	27.648	34.591	43.167	214.999	2.109	439
460	1.170	32.925	1.164	27.647	34.590	43.166	214.999	2.155	459
480	1.169	32.924	1.163	27.646	34.589	43.165	214.999	2.201	479
500	1.168	32.923	1.162	27.645	34.588	43.164	214.999	2.247	499
520	1.167	32.922	1.161	27.644	34.587	43.163	214.999	2.293	519
540	1.166	32.921	1.160	27.643	34.586	43.162	214.999	2.339	539
560	1.165	32.920	1.159	27.642	34.585	43.161	214.999	2.385	559
580	1.164	32.919	1.158	27.641	34.584	43.160	214.999	2.431	579
600	1.163	32.918	1.157	27.640	34.583	43.159	214.999	2.477	599
620	1.162	32.917	1.156	27.639	34.582	43.158	214.999	2.523	619
640	1.161	32.916	1.155	27.638	34.581	43.157	214.999	2.569	639
660	1.160	32.915	1.154	27.637	34.580	43.156	214.999	2.615	659
680	1.159	32.914	1.153	27.636	34.579	43.155	214.999	2.661	679
700	1.158	32.913	1.152	27.635	34.578	43.154	214.999	2.707	699
720	1.157	32.912	1.151	27.634	34.577	43.153	214.999	2.753	719
740	1.156	32.911	1.150	27.633	34.576	43.152	214.999	2.799	739
760	1.155	32.910	1.149	27.632	34.575	43.151	214.999	2.845	759
780	1.154	32.909	1.148	27.631	34.574	43.150	214.999	2.891	779
800	1.153	32.908	1.147	27.630	34.573	43.149	214.999	2.937	799
820	1.152	32.907	1.146	27.629	34.572	43.148	214.999	2.983	819
840	1.151	32.906	1.145	27.628	34.571	43.147	214.999	3.029	839
860	1.150	32.905	1.144	27.627	34.570	43.146	214.999	3.075	859
880	1.149	32.904	1.143	27.626	34.569	43.145	214.999	3.121	879
900	1.148	32.903	1.142	27.625	34.568	43.144	214.999	3.167	899
920	1.147	32.902	1.141	27.624	34.567	43.143	214.999	3.213	919
940	1.146	32.901	1.140	27.623	34.566	43.142	214.999	3.259	939
960	1.145	32.900	1.139	27.622	34.565	43.141	214.999	3.305	959
980	1.144	32.899	1.138	27.621	34.564	43.140	214.999	3.351	979
1000	1.143	32.898	1.137	27.620	34.563	43.139	214.999	3.397	999
1020	1.142	32.897	1.136	27.619	34.562	43.138	214.999	3.443	1019
1040	1.141	32.896	1.135	27.618	34.561	43.137	214.999	3.489	1039
1060	1.140	32.895	1.134	27.617	34.560	43.136	214.999	3.535	1059
1080	1.139	32.894	1.133	27.616	34.559	43.135	214.999	3.581	1079
1100	1.138	32.893	1.132	27.615	34.558	43.134	214.999	3.627	1099
1120	1.137	32.892	1.131	27.614	34.557	43.133	214.999	3.673	1119
1140	1.136	32.891	1.130	27.613	34.556	43.132	214.999	3.719	1139
1160	1.135	32.890	1.129	27.612	34.555	43.131	214.999	3.765	1159
1180	1.134	32.889	1.128	27.611	34.554	43.130	214.999	3.811	1179
1200	1.133	32.888	1.127	27.610	34.553	43.129	214.999	3.857	1199
1220	1.132	32.887	1.126	27.609	34.552	43.128	214.999	3.903	1219
1240	1.131	32.886	1.125	27.608	34.551	43.127	214.999	3.949	1239
1260	1.130	32.885	1.124	27.607	34.550	43.126	214.999	3.995	1259
1280	1.129	32.884	1.123	27.606	34.549	43.125	214.999	4.041	1279
1300	1.128	32.883	1.122	27.605	34.548	43.124	214.999	4.087	1299
1320	1.127	32.882	1.121	27.604	34.547	43.123	214.999	4.133	1319
1340	1.126	32.881	1.120	27.603	34.546	43.122	214.999	4.179	1339
1360	1.125	32.880	1.119	27.602	34.545	43.121	214.999	4.225	1359
1380	1.124	32.879	1.118	27.601	34.544	43.120	214.999	4.271	1379
1400	1.123	32.878	1.117	27.600	34.543	43.119	214.999	4.317	1399
1420	1.122	32.877	1.116	27.599	34.542	43.118	214.999	4.363	1419
1440	1.121	32.876	1.115	27.598	34.541	43.117	214.999	4.409	1439
1460	1.120	32.875	1.114	27.597	34.540	43.116	214.999	4.455	1459
1480	1.119	32.874	1.113	27.596	34.539	43.115	214.999	4.501	1479
1500	1.118	32.873	1.112	27.595	34.538	43.114	214.999	4.547	1499
1520	1.117	32.872	1.111	27.594	34.537	43.113	214.999	4.593	1519
1540	1.116	32.871	1.110	27.593	34.536	43.112	214.999	4.639	1539
1560	1.115	32.870	1.109	27.592	34.535	43.111	214.999	4.685	1559
1580	1.114	32.869	1.108	27.591	34.534	43.110	214.999	4.731	1579
1600	1.113	32.868	1.107	27.590	34.533	43.109	214.999	4.777	1599
1620	1.112	32.867	1.106	27.589	34.532	43.108	214.999	4.823	1619
1640	1.111	32.866	1.105	27.588	34.531	43.107	214.999	4.869	1639
1660	1.110	32.865	1.104	27.587	34.530	43.106	214.999	4.915	1659
1680	1.109	32.864	1.103	27.586	34.529	43.105	214.999	4.961	1679
1700	1.108	32.863	1.102	27.585	34.528	43.104	214.999	5.007	1699
1720	1.107	32.862	1.101	27.584	34.527	43.103	214.999	5.053	1719
1740	1.106	32.861	1.100	27.583	34.526	43.102	214.999	5.099	1739
1760	1.105	32.860	1.099	27.582	34.525	43.101	214.999	5.145	1759
1780	1.104	32.859	1.098	27.581	34.524	43.100	214.999	5.191	1779
1800	1.103	32.858	1.097	27.580	34.523	43.099	214.999	5.237	1799
1820	1.102	32.857	1.096	27.579	34.522	43.098	214.999	5.283	1819
1840	1.101	32.856	1.095	27.578	34.521	43.097	214.999	5.329	1839
1860	1.100	32.855	1.094	27.577	34.520	43.096	214.999	5.375	1859
1880	1.099	32.854	1.093	27.576	34.519	43.095	214.999	5.421	1879
1900	1.098	32.853	1.092	27.575	34.518	43.094	214.999	5.467	1899
1920	1.097	32.852	1.091	27.574	34.517	43.093	214.999	5.513	1919
1940	1.096	32.851	1.090	27.573	34.516	43.092	214.999	5.559	1939
1960	1.095	32.850	1.089	27.572	34.515	43.091	214.999	5.605	1959
1980	1.094	32.849	1.088	27.571	34.514	43.090	214.999	5.651	1979
2000	1.093	32.848	1.087	27.570	34.513	43.089	214.999	5.697	1999
2020	1.092	32.847	1.086	27.569	34.512	43.088	214.999	5.743	2019
2040	1.091	32.846	1.085	27.568	34.511	43.087	214.999	5.789	2039
2060	1.090	32.845	1.084	27.567	34.510	43.086	214.999	5.835	2059
2080	1.089	32.844	1.083	27.566	34.509	43.085	214.999	5.881	2079
2100	1.088	32.843	1.082	27.565	34.508	43.084	214.999	5.927	2099
2120	1.087	32.842	1.081	27.564	34.507	43.083	214.999	5.973	2119
2140	1.086	32.841	1.080	27.563	34.506	43.082	214.999	6.019	2139
2160	1.085	32.840	1.079	27.562	34.505	43.081	214.999	6.065	2159
2180	1.								

# MARATHON 2 STA. 65



R. V. THOMAS WASHINGTON MARATHON LEG 11 STATION 44

LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BOTTLE	WIND	SPEED	AIR TEMP	WET BULB	BAROM
44 12.4N	171 59.3W	4 25 84	2112	M	DIR	KT	DEG C	DEG C	MB
44 12.4N	171 59.3W	4 25 84	2112	1299	170	10	10.0	9.9	1022.0

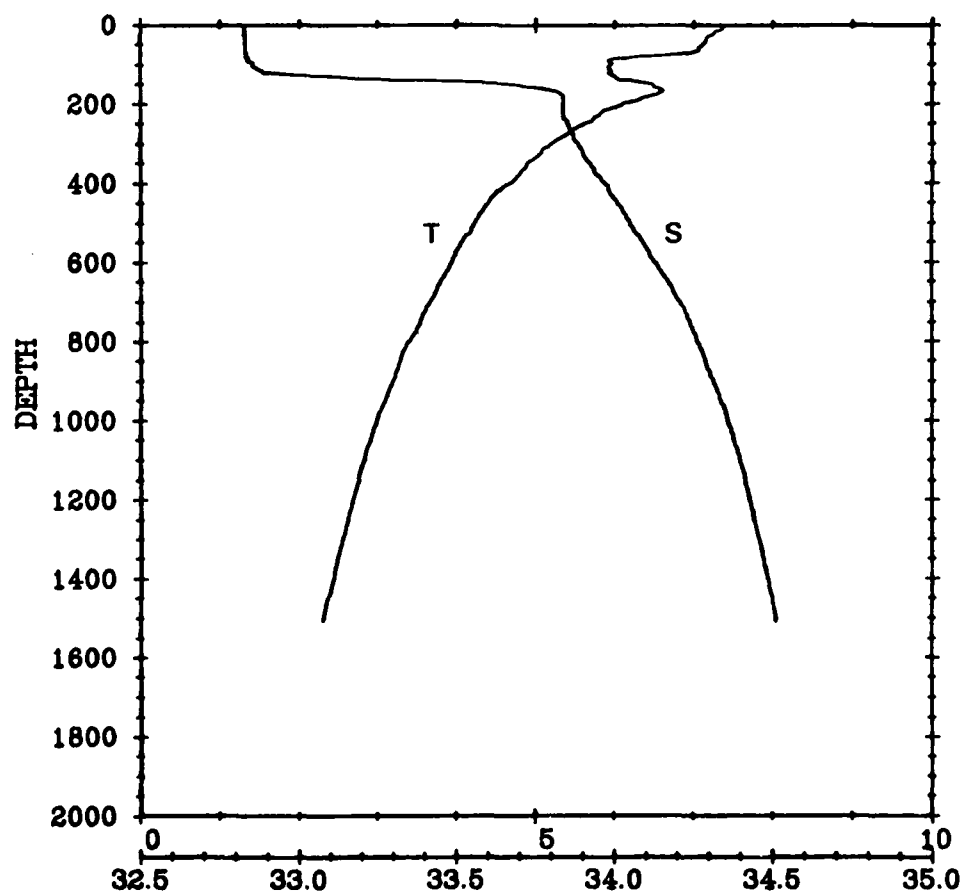
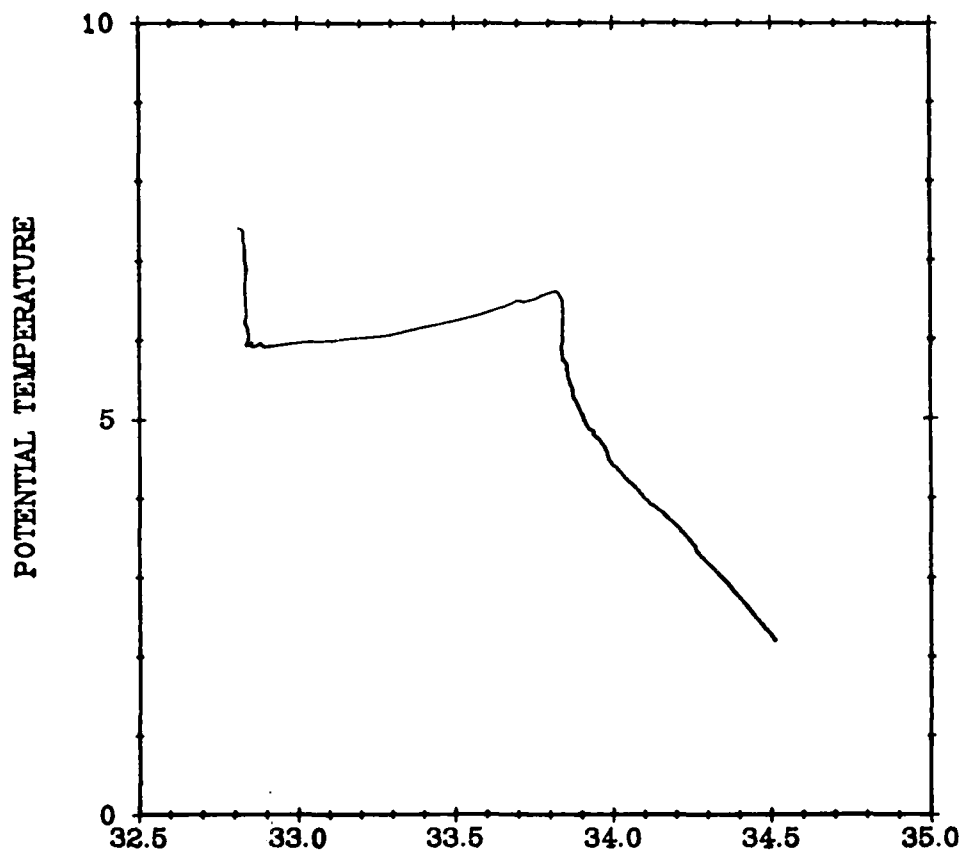
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C					KG/CM <sup>3</sup>		M
1	12.19	32.926	12.19	25.655	34.614	43.177	232.474	1.020		1
2	12.26	32.929	12.26	25.673	34.637	43.210	231.141	1.046		19
4	12.10	32.932	12.10	25.690	34.660	43.243	229.628	1.072		39
6	12.14	32.934	12.14	25.710	34.674	43.256	228.541	1.104		59
8	12.46	32.937	12.46	25.791	34.705	43.401	227.145	1.181		79
10	12.90	32.953	12.90	25.842	34.791	43.571	225.349	1.227		99
12	13.84	33.004	13.84	25.971	35.003	44.094	223.543	1.321		119
14	15.66	33.041	15.66	26.029	35.021	44.024	223.652	1.398		139
16	16.66	33.054	16.66	26.093	35.020	44.047	223.027	1.455		159
18	17.21	33.084	17.21	26.158	35.015	44.062	222.101	1.505		179
20	17.42	33.121	17.42	26.202	35.004	44.054	221.597	1.549		199
22	17.53	33.167	17.53	26.234	35.000	44.051	221.078	1.589		219
24	17.68	33.199	17.68	26.259	35.000	44.049	220.538	1.621		239
26	17.84	33.249	17.84	26.277	35.003	44.043	220.071	1.651		259
28	17.94	33.277	17.94	26.282	35.000	44.045	219.577	1.678		279
30	18.10	33.254	18.10	26.280	35.012	44.048	219.058	1.674		299
32	18.20	33.262	18.20	26.282	35.008	44.026	218.574	1.754		319
34	18.20	33.310	18.20	26.321	35.008	44.007	218.062	1.748		339
36	18.20	33.339	18.20	26.379	35.036	44.094	217.997	1.726		359
38	18.34	33.394	18.34	26.425	35.090	44.147	217.879	1.700		379
40	18.59	33.426	18.59	26.451	35.114	44.197	217.744	1.670		399
42	18.69	33.451	18.69	26.482	35.174	44.244	217.848	1.638		419
44	18.84	33.481	18.84	26.527	35.114	44.290	217.997	1.603		439
46	18.94	33.509	18.94	26.560	35.153	44.315	218.005	1.561		459
48	19.10	33.512	19.10	26.565	35.159	44.342	218.598	1.577		479

## WATKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	SIG 02	O2 SAT	SIG0	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L		UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	12.19	32.936	12.19	104.0	17.5	1.13	11.3	0.11	7.171	25.664	34.623	43.196		1
2	12.12	32.936	12.12	103.7	17.2	1.16	11.4	0.11	7.108	25.700	34.671	43.246		19
4	12.10	32.958	12.10	103.8	18.2	1.26	12.7	0.18	6.107	25.867	34.891	43.515		39
6	12.14	32.951	12.14	99.4	19.0	1.29	13.6	0.23	5.961	25.938	34.962	43.587		59
8	12.46	33.004	12.46	79.5	30.3	1.53	20.5	0.11	6.162	26.100	35.487	44.069		79
10	12.90	33.041	12.90	72.5	38.2	1.70	23.0	0.11	6.223	26.412	35.617	44.209		99
12	13.84	33.054	13.84	64.3	45.0	1.89	26.1	0.11	5.759	26.674	35.694	44.315		119
14	15.66	33.084	15.66	48.9	58.6	2.21	31.0	0.10	5.238	26.760	35.805	44.450		139
16	16.66	33.095	16.66	31.3	78.6	2.60	36.7	0.10	4.680	26.991	35.963	44.632		159
18	17.21	33.152	17.21	21.3	95.9	2.82	39.9	0.10	4.205	27.011	36.106	44.797		179
20	17.42	33.171	17.42	14.9	109.2	2.94	41.6	0.10	3.892	27.106	36.216	44.920		199
22	17.53	33.207	17.53	11.3	121.1	3.02	42.9	0.10	3.621	27.193	36.316	45.032		219
24	17.68	33.267	17.68	8.9	130.3	3.07	43.6	0.10	3.348	27.268	36.404	45.123		239
26	17.84	33.316	17.84	7.0	138.7	3.10	44.1	0.10	3.127	27.327	36.475	45.214		259
28	17.94	33.361	17.94	5.6	145.6	3.11	44.5	0.10	2.926	27.382	36.519	45.288		279
30	18.10	33.444	18.10	4.8	161.8		45.1	0.10	2.731	27.482	36.659	45.426		299
32	18.20	33.511	18.20	5.6	173.6		44.9	0.10	2.503	27.563	36.757	45.541		319

# MARATHON 2 STA. 66



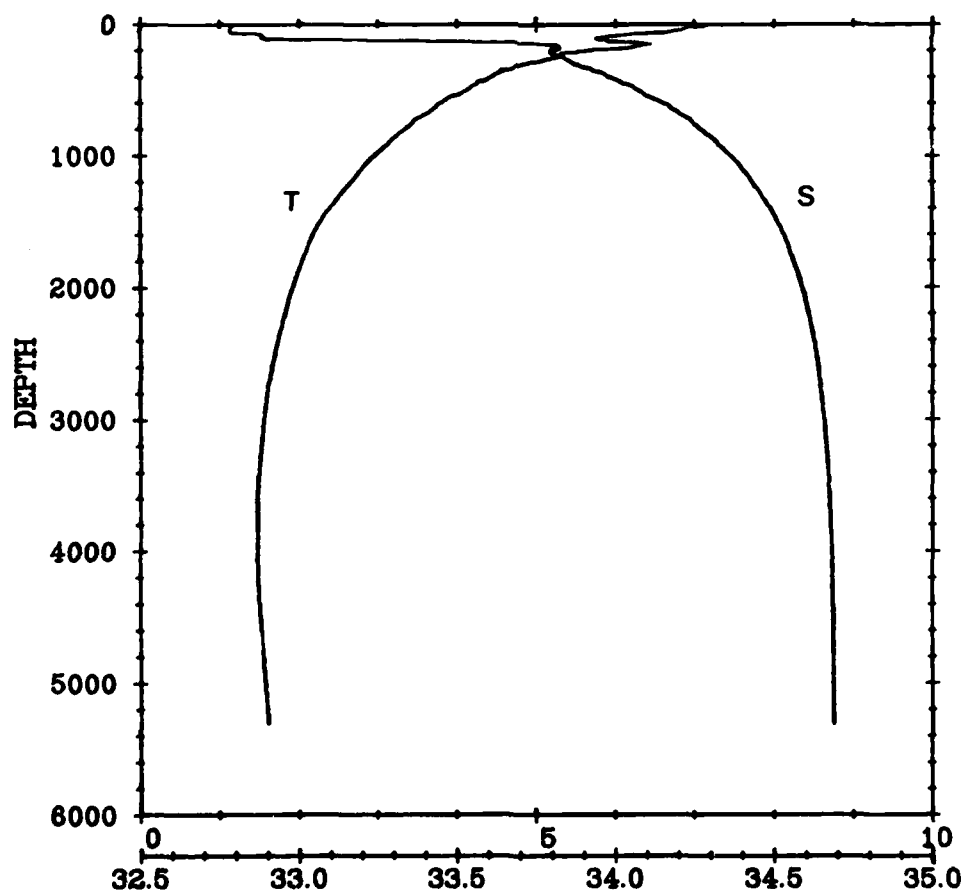
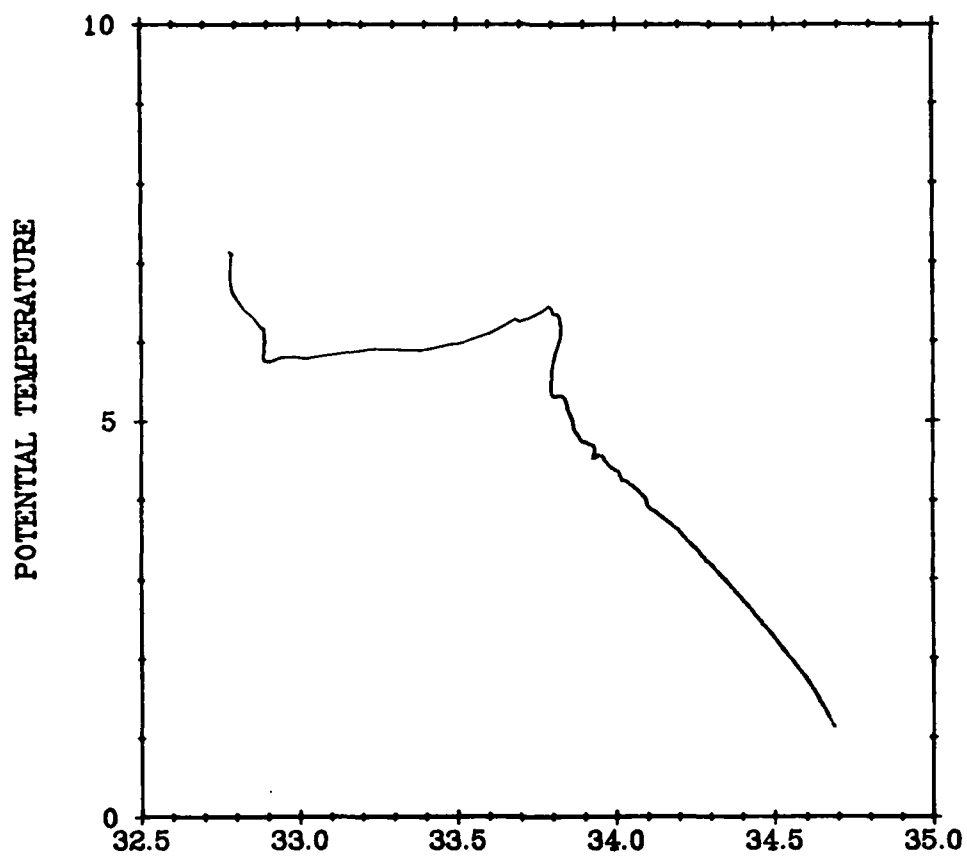
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STATION	DATE	TIME	TEMP	SALINITY	POT. TEMP	SIGMA T	SIGMA T 2	SIGMA T 3	DMA	DYNAMIC HT	DEPTH
FREQS	FB	DES	DES		DES				CM		M
1	1	1	12.785	34.770	27.477	34.642	43.271	212.284	1.367		1
2	1	1	12.785	34.766	27.476	34.640	43.264	212.197	1.345		2
3	1	1	12.784	34.763	27.474	34.637	43.254	212.124	1.342		3
4	1	1	12.781	34.767	27.473	34.636	43.251	212.044	1.319		4
5	1	1	12.772	34.770	27.471	34.635	43.247	211.974	1.292		5
6	1	1	12.764	34.769	27.469	34.634	43.245	211.904	1.265		6
7	1	1	12.751	34.771	27.466	34.633	43.242	211.834	1.238		7
8	1	1	12.733	34.773	27.463	34.634	43.239	211.764	1.213		8
9	1	1	12.714	34.774	27.462	34.633	43.237	211.694	1.189		9
10	1	1	12.693	34.773	27.460	34.633	43.234	211.624	1.164		10
11	1	1	12.670	34.772	27.458	34.633	43.231	211.554	1.139		11
12	1	1	12.645	34.771	27.456	34.632	43.228	211.484	1.114		12
13	1	1	12.619	34.770	27.454	34.632	43.225	211.414	1.089		13
14	1	1	12.592	34.769	27.452	34.631	43.222	211.344	1.064		14
15	1	1	12.564	34.768	27.450	34.631	43.219	211.274	1.039		15
16	1	1	12.535	34.767	27.448	34.630	43.216	211.204	1.014		16
17	1	1	12.505	34.766	27.446	34.629	43.213	211.134	0.989		17
18	1	1	12.474	34.765	27.444	34.628	43.210	211.064	0.964		18
19	1	1	12.442	34.764	27.442	34.627	43.207	210.994	0.939		19
20	1	1	12.409	34.763	27.440	34.626	43.204	210.924	0.914		20
21	1	1	12.375	34.762	27.438	34.625	43.201	210.854	0.889		21
22	1	1	12.340	34.761	27.436	34.624	43.198	210.784	0.864		22
23	1	1	12.304	34.760	27.434	34.623	43.195	210.714	0.839		23
24	1	1	12.267	34.759	27.432	34.622	43.192	210.644	0.814		24
25	1	1	12.229	34.758	27.430	34.621	43.189	210.574	0.789		25
26	1	1	12.190	34.757	27.428	34.620	43.186	210.504	0.764		26
27	1	1	12.150	34.756	27.426	34.619	43.183	210.434	0.739		27
28	1	1	12.109	34.755	27.424	34.618	43.180	210.364	0.714		28
29	1	1	12.067	34.754	27.422	34.617	43.177	210.294	0.689		29
30	1	1	12.024	34.753	27.420	34.616	43.174	210.224	0.664		30
31	1	1	11.980	34.752	27.418	34.615	43.171	210.154	0.639		31
32	1	1	11.935	34.751	27.416	34.614	43.168	210.084	0.614		32
33	1	1	11.889	34.750	27.414	34.613	43.165	210.014	0.589		33
34	1	1	11.842	34.749	27.412	34.612	43.162	209.944	0.564		34
35	1	1	11.794	34.748	27.410	34.611	43.159	209.874	0.539		35
36	1	1	11.746	34.747	27.408	34.610	43.156	209.804	0.514		36
37	1	1	11.698	34.746	27.406	34.609	43.153	209.734	0.489		37
38	1	1	11.649	34.745	27.404	34.608	43.150	209.664	0.464		38
39	1	1	11.600	34.744	27.402	34.607	43.147	209.594	0.439		39
40	1	1	11.551	34.743	27.400	34.606	43.144	209.524	0.414		40
41	1	1	11.502	34.742	27.398	34.605	43.141	209.454	0.389		41
42	1	1	11.453	34.741	27.396	34.604	43.138	209.384	0.364		42
43	1	1	11.404	34.740	27.394	34.603	43.135	209.314	0.339		43
44	1	1	11.355	34.739	27.392	34.602	43.132	209.244	0.314		44
45	1	1	11.306	34.738	27.390	34.601	43.129	209.174	0.289		45
46	1	1	11.257	34.737	27.388	34.600	43.126	209.104	0.264		46
47	1	1	11.208	34.736	27.386	34.599	43.123	209.034	0.239		47
48	1	1	11.159	34.735	27.384	34.598	43.120	208.964	0.214		48
49	1	1	11.110	34.734	27.382	34.597	43.117	208.894	0.189		49
50	1	1	11.061	34.733	27.380	34.596	43.114	208.824	0.164		50
51	1	1	11.012	34.732	27.378	34.595	43.111	208.754	0.139		51
52	1	1	10.963	34.731	27.376	34.594	43.108	208.684	0.114		52
53	1	1	10.914	34.730	27.374	34.593	43.105	208.614	0.089		53
54	1	1	10.865	34.729	27.372	34.592	43.102	208.544	0.064		54
55	1	1	10.816	34.728	27.370	34.591	43.099	208.474	0.039		55
56	1	1	10.767	34.727	27.368	34.590	43.096	208.404	0.014		56
57	1	1	10.718	34.726	27.366	34.589	43.093	208.334			57
58	1	1	10.669	34.725	27.364	34.588	43.090	208.264			58
59	1	1	10.620	34.724	27.362	34.587	43.087	208.194			59
60	1	1	10.571	34.723	27.360	34.586	43.084	208.124			60
61	1	1	10.522	34.722	27.358	34.585	43.081	208.054			61
62	1	1	10.473	34.721	27.356	34.584	43.078	207.984			62
63	1	1	10.424	34.720	27.354	34.583	43.075	207.914			63
64	1	1	10.375	34.719	27.352	34.582	43.072	207.844			64
65	1	1	10.326	34.718	27.350	34.581	43.069	207.774			65
66	1	1	10.277	34.717	27.348	34.580	43.066	207.704			66
67	1	1	10.228	34.716	27.346	34.579	43.063	207.634			67
68	1	1	10.179	34.715	27.344	34.578	43.060	207.564			68
69	1	1	10.130	34.714	27.342	34.577	43.057	207.494			69
70	1	1	10.081	34.713	27.340	34.576	43.054	207.424			70
71	1	1	10.032	34.712	27.338	34.575	43.051	207.354			71
72	1	1	9.983	34.711	27.336	34.574	43.048	207.284			72
73	1	1	9.934	34.710	27.334	34.573	43.045	207.214			73
74	1	1	9.885	34.709	27.332	34.572	43.042	207.144			74
75	1	1	9.836	34.708	27.330	34.571	43.039	207.074			75
76	1	1	9.787	34.707	27.328	34.570	43.036	207.004			76
77	1	1	9.738	34.706	27.326	34.569	43.033	206.934			77
78	1	1	9.689	34.705	27.324	34.568	43.030	206.864			78
79	1	1	9.640	34.704	27.322	34.567	43.027	206.794			79
80	1	1	9.591	34.703	27.320	34.566	43.024	206.724			80
81	1	1	9.542	34.702	27.318	34.565	43.021	206.654			81
82	1	1	9.493	34.701	27.316	34.564	43.018	206.584			82
83	1	1	9.444	34.700	27.314	34.563	43.015	206.514			83
84	1	1	9.395	34.699	27.312	34.562	43.012	206.444			84
85	1	1	9.346	34.698	27.310	34.561	43.009	206.374			85
86	1	1	9.297	34.697	27.308	34.560	43.006	206.304			86
87	1	1	9.248	34.696	27.306	34.559	43.003	206.234			87
88	1	1	9.199	34.695	27.304	34.558	43.000	206.164			88
89	1	1	9.150	34.694	27.302	34.557	42.997	206.094			89
90	1	1	9.101	34.693	27.300	34.556	42.994	206.024			90
91	1	1	9.052	34.692	27.298	34.555	42.991	205.954			91
92	1	1	9.003	34.691	27.296	34.554	42.988	205.884			92
93	1	1	8.954	34.690	27.294	34.553	42.985	205.814			93
94	1	1	8.905	34.689	27.292	34.552	42.982	205.744			94
95	1	1	8.856	34.688	27.290	34.551	42.979	205.674			95
96	1	1	8.807	34.687	27.288	34.550	42.976	205.604			96
97	1	1	8.758	34.686	27.286	34.549	42.973	205.534			97
98	1	1	8.709	34.685	27.284	34.548	42.970	205.464			98
99	1	1	8.660	34.684	27.282	34.547	42.967	205.394			99
100	1	1	8.611	34.683	27.280	34.546	42.964	205.324			100
101	1	1	8.562	34.682	27.278	34.545	42.961	205.254			101
102	1	1	8.513	34.681	27.276	34.544	42.958	205.184			102
103	1	1	8.464	34.680	27.274	34.543	42.955	205.114			103
104	1	1	8.415	34.679	27.272	34.542	42.952	205.044			104
105	1	1	8.366	34.678	27.270	34.541	42.949	204.974			105
106	1	1	8.317	34.677	27.268	34.540	42.946	204.904			106
107	1	1	8.268	34.676	27.266	34.539	42.943	204.834			107
108	1	1	8.219	34.675	27.264	34.538	42.940	204.764			108
109	1	1	8.170	34.674	27.262	34.537	42.937	204.694			109
110	1	1	8.121	34.673	27.260	34.536	42.934	204.624			110
111	1	1	8.072	34.672	27.258	34.535	42.931	204.554			111
112	1	1	8.023	34.671	27.256	34.534	42.928	204.484			112
113	1	1	7.974	34.670	27.254	34.533	42.925	204.414			113
114	1	1	7.925	34.669	27.252						

WUSKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 32	02 SAT	SIG3	P04	N03	N02	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L		UM/L	SM/L	TUBIN	DEG C				DB
0	11.193	32.793	7.14	104.4	19.9	1.16	1.2	7.13	7.198	25.960	34.672	43.218		1
1	5.796	32.794	7.16	103.9	19.9	1.17	1.1	7.10	6.792	25.911	34.689	43.218		49
44	5.814	32.844	7.09	100.6	19.7	1.26	1.2	7.21	5.826	25.973	34.706	43.540		94
149	6.018	33.396	5.96	94.0	29.2	4.19	1.4	7.01	6.245	26.438	35.448	44.059		150
199	6.379	33.821	4.97	71.0	41.9	1.75	2.4	7.00	1.362	26.639	35.954	44.711		199
290	6.772	33.969	3.25	45.5	63.4	2.29	3.2	7.00	4.979	26.791	35.940	44.726		293
399	4.435	33.694	1.94	26.9	96.9	2.70	3.9	7.00	4.465	26.719	36.721	44.711		400
499	4.116	34.181	1.41	19.3	111.3	2.35	4.9	7.00	4.100	27.044	36.144	44.819		502
501	3.797	34.152	0.99	13.5	116.6	2.37	4.6	7.00	3.794	27.144	36.261	44.972		605
699	3.759	34.224	0.92	11.1	125.2		4.3	7.00	3.320	27.217	36.345	45.066		706
799	3.129	34.291	0.56	8.9	133.9	3.19	4.4	7.00	1.269	27.296	36.426	47.159		906
899	3.114	34.137	1.51	6.9	142.6	3.11	4.4	7.00	2.372	27.344	36.493	45.216		908
999	2.940	34.173	0.40	5.1	150.8	3.16	4.3	7.00	2.075	27.396	36.355	45.307		1006
1245	2.799	34.449	0.30	4.6	164.6	3.19	4.9	7.00	2.905	27.489	36.667	45.416		1259
1494	2.494	34.521	0.35	2.2	174.3	1.14	4.6	7.00	2.194	27.566	36.760	45.744		1512
1791	2.191	34.593	0.46	1.2	185.6	2.37	4.9	7.00	1.963	27.622	36.826	45.621		1763
1991	2.191	34.593	0.44	1.6	191.3	3.03	4.9	7.00	1.965	27.660	36.835	45.679		1991
2397	2.589	34.635	2.11	20.9	193.1	2.97	4.7	7.00	1.942	27.716	36.946	45.631		2329
2799	2.799	34.598	2.07	13.4	198.3	2.95	4.0	7.00	1.942	27.747	36.986	45.922		2729
3449	2.799	34.634	1.97	19.6	192.0	4.95	3.9	7.00	2.214	27.769	37.714	47.945		3440
3799	2.498	34.591	3.11	42.3	171.4	2.60	3.9	7.00	1.105	27.790	37.729	45.965		4743
4494	2.191	34.666	1.37	43.1	174.2		3.9	7.00	1.112	27.794	37.734	45.871		4663
4799	1.797	34.597	3.40	43.4	176.2		3.7	7.00	1.125	27.785	37.716	45.971		5086
5101	1.611	34.598	3.40	43.4	176.0	2.58	3.5	7.00	1.126	27.796	37.737	45.874		5411



# MARATHON 2 STA. 67

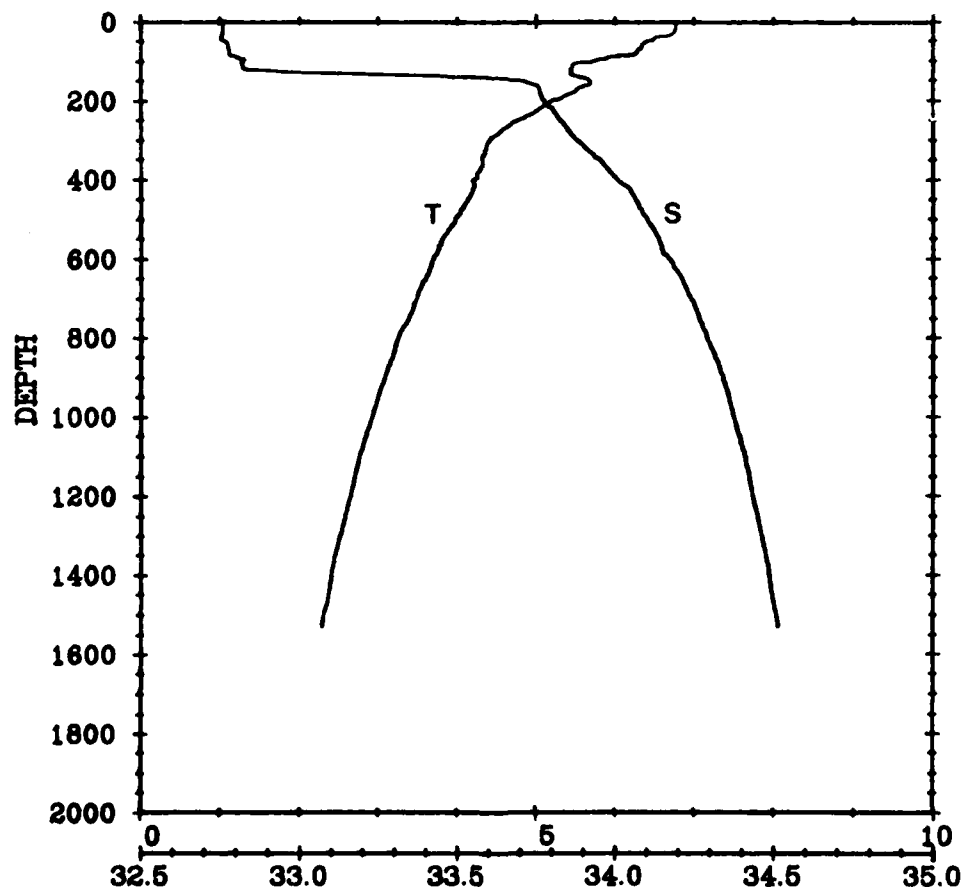
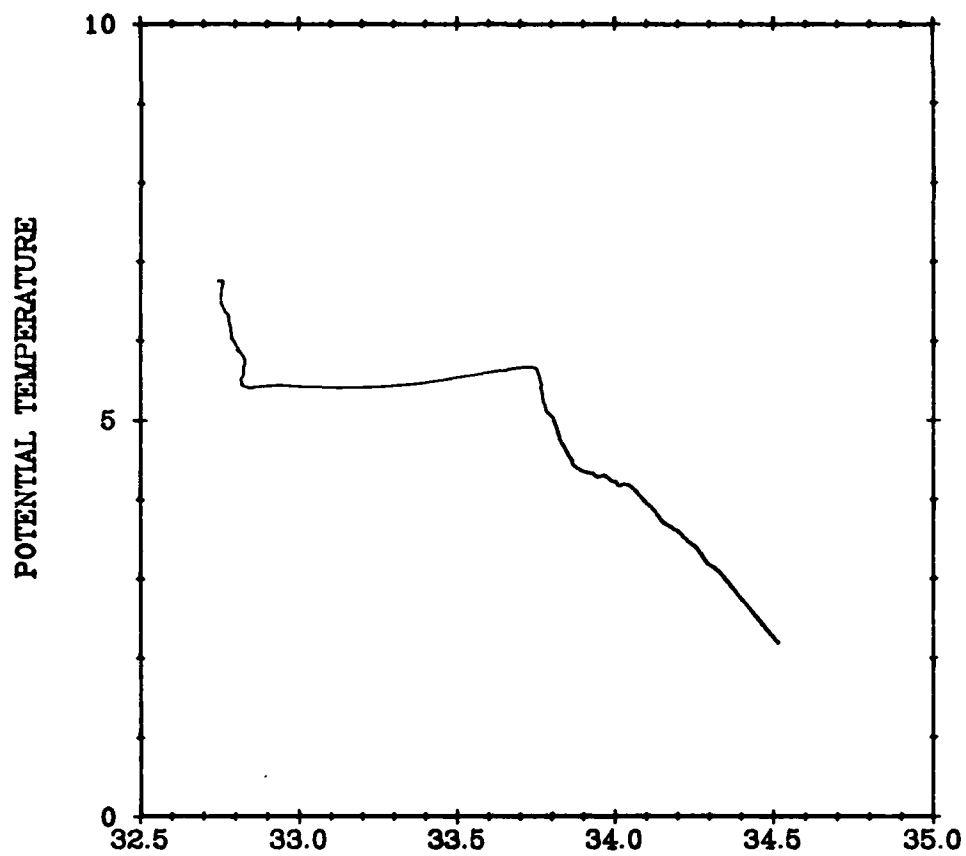


LATITUDE LONGITUDE MO DY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB PAROM  
 45 11' N 151 54' W 26 94 1128 1322 180 12 9 2 12 9

STD DATA									
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC	DEPTH
DB	DEG C		DEG C				10 TON	HT	M
1	4.768	32.754	5.748	27.692	34.671	43.252	229.454	1.000	1
20	5.752	32.753	5.750	27.687	34.676	43.259	229.491	1.044	19
40	5.557	32.755	5.554	27.710	34.729	43.310	229.740	1.044	39
60	5.343	32.774	5.340	27.752	34.740	43.377	229.736	1.017	59
80	5.190	32.792	5.187	27.773	34.794	43.401	229.794	1.000	79
100	5.107	32.807	5.109	27.865	34.904	43.442	229.897	1.025	99
120	5.048	32.858	5.056	27.917	35.057	44.194	170.931	1.116	119
140	5.210	33.177	5.214	26.680	35.728	44.373	137.493	1.388	139
160	4.771	33.827	4.772	26.773	35.844	44.612	129.747	1.435	159
180	4.417	33.873	4.395	26.853	35.941	44.625	120.148	1.317	179
200	4.317	33.743	4.242	26.909	36.011	44.700	110.870	1.277	199
220	4.225	34.126	4.196	26.975	36.072	44.763	110.955	1.513	219
240	4.119	34.154	4.106	27.011	36.111	44.825	106.109	1.628	239
260	3.982	34.199	3.946	27.075	36.133	44.895	102.125	1.741	259
280	3.705	34.157	3.653	27.157	36.279	44.994	94.963	1.918	279
300	3.487	34.217	3.439	27.215	36.367	45.132	89.161	1.970	299
320	3.278	34.289	3.204	27.299	36.442	45.173	82.524	1.915	319
340	3.191	34.319	3.130	27.355	36.507	45.251	77.571	1.946	339
360	2.914	34.373	2.957	27.397	36.557	45.308	74.076	1.971	359
380	2.775	34.407	2.702	27.418	36.607	45.367	70.418	1.943	379
400	2.559	34.432	2.579	27.459	36.644	45.409	67.358	1.913	399
420	2.332	34.458	2.446	27.501	36.683	45.454	65.119	1.979	419
440	2.401	34.483	2.318	27.533	36.722	45.499	62.231	1.943	439
460	2.124	34.504	2.224	27.556	36.749	45.532	60.134	1.914	459
480	2.277	34.524	2.174	27.558	36.754	45.549	59.288	1.933	479

WIGGIN BOTTLE DATA									
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIG1	PC4	NO3	NO2	TRIT
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN
2	5.745	32.751	7.45	104.4	20.5	1.22	12.2	0.12	5.745
43	5.425	32.751	7.28	104.4	20.5	1.23	12.3	0.12	5.415
101	5.919	32.805	7.13	100.2	21.2	1.32	13.7	0.18	5.431
129	5.110	33.403	5.49	83.3	32.1	1.60	20.7	0.32	5.500
155	5.910	33.753	5.10	72.4	42.1	1.80	24.7	0.41	5.499
201	5.115	33.785	4.70	61.1	57.5	1.99	27.9	0.41	5.299
231	4.955	33.875	3.23	44.9	65.4	2.37	31.5	0.41	4.677
258	4.410	33.879	2.54	35.1	74.7	2.57	35.6	0.41	4.458
404	4.251	34.125	1.73	23.8	91.9	2.79	39.8	0.41	4.224
497	3.971	34.122	1.22	16.7	106.4	2.92	42.7	0.40	3.936
507	3.492	34.112	0.93	12.4	117.4	2.98	42.9	0.40	3.650
645	3.486	34.214	0.77	10.4	127.7	3.04	43.5	0.40	3.438
795	3.279	34.284	0.57	9.3	135.0	3.07	43.9	0.40	3.224
892	3.118	34.315	0.51	8.2	142.5	3.11	44.5	0.40	3.047
1001	2.920	34.375	0.44	5.9	149.9	3.13	44.9	0.40	2.852
1240	2.595	34.445	0.39	5.2	162.9		45.4	0.40	2.512
1500	2.275	34.514	0.50	7.9	174.8		45.1	0.40	2.172

# MARATHON 2 STA. 68

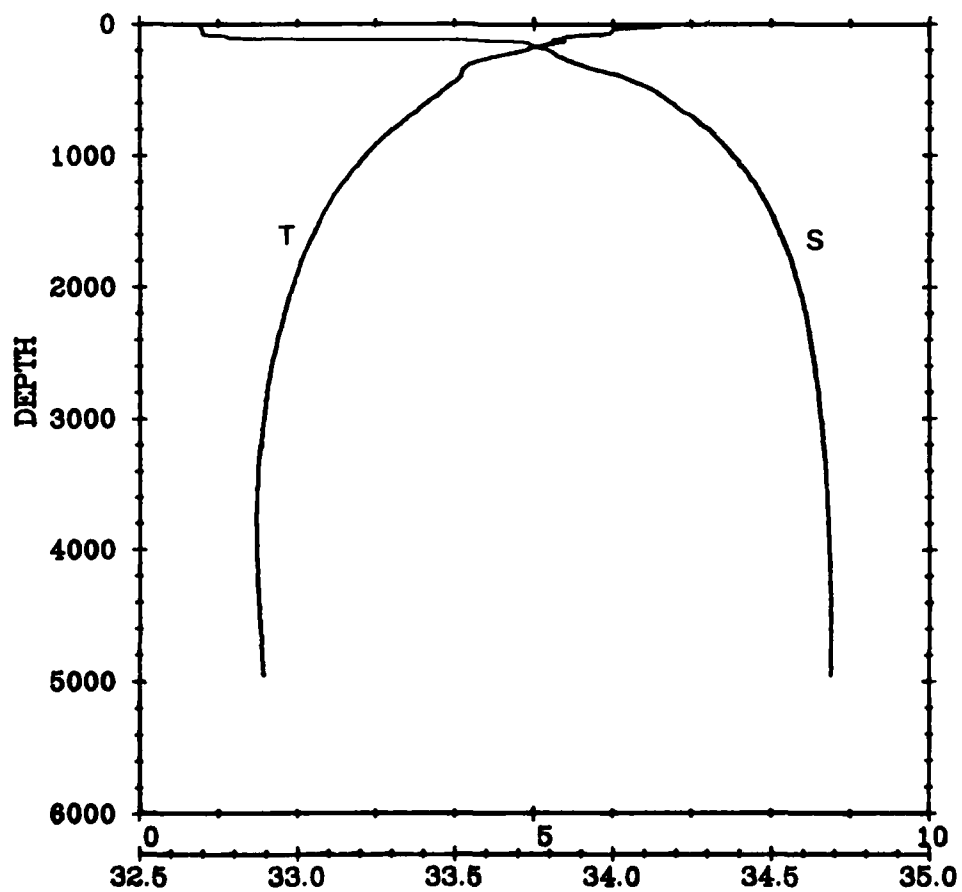
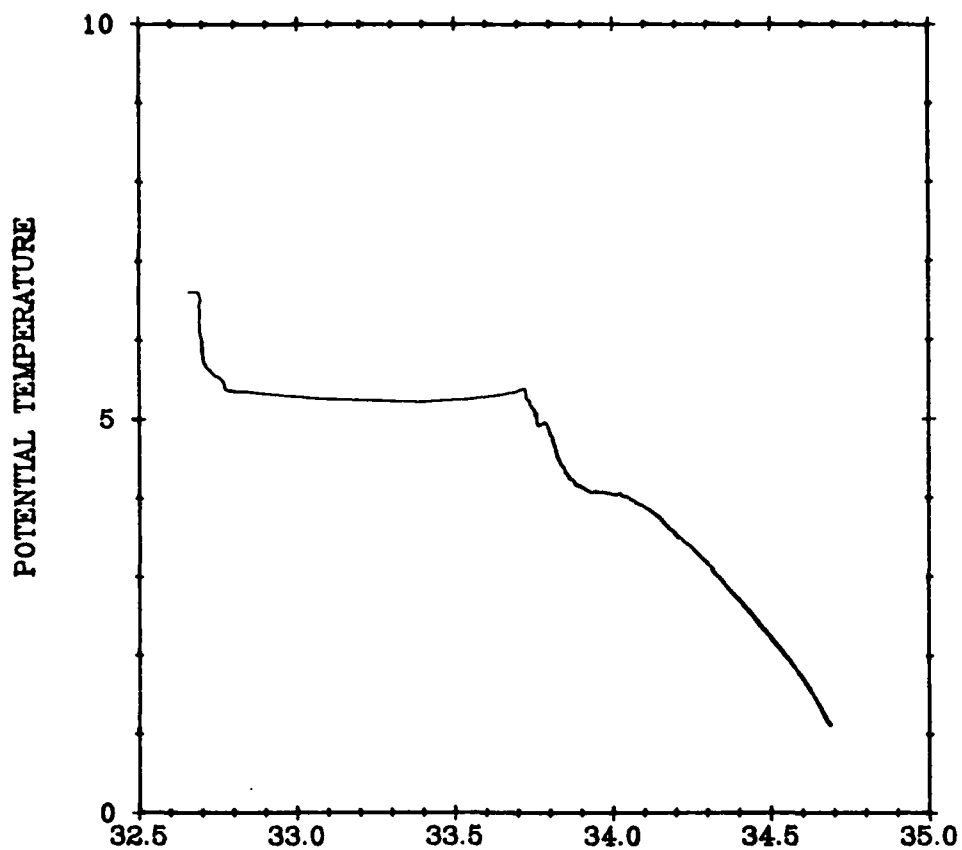


LATITUDE	LONGITUDE	MO	DAY	HR	START TIME	BATT	WIND	DEPTH	AIR TEMP	WATER TEMP	WAVE HGT	SEA DIR
					TIME	NO	DIR	M	DEG	DEG	FT	DEG
42 14 N	151 34 W	1	26	84	1300	1	150	10	59.7	59.7	1.0	150

[illegible]

WISKIN BOTTLE DATA														
DEPTH M	TEMP DEG C	SALINITY	DIST 02 ML/0	02 SAT %	SIG1 UM/L	P04 UM/L	M03 UM/L	M02 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
1	5.709	32.699	7.25	104.9	20.9	1.27	12.5	1.12		5.709	25.645	34.637	43.232	1
2	6.513	32.698	7.27	104.6	21.2		12.5	1.12		6.511	25.657	34.654	43.253	19
3	6.000	32.703	7.35	104.6	21.2		12.8	1.11		5.995	25.739	34.765	43.192	45
4	5.274	32.759	7.12	99.6	22.1		14.2	1.12		5.265	25.969	34.930	43.590	99
5	4.372	33.756	5.02	70.9	42.5		25.2	1.00		5.360	26.647	35.689	44.329	145
10	4.919	33.775	5.10	71.2	51.2		28.6	1.01		4.904	26.715	35.779	44.440	196
15	4.224	33.880	2.31	31.7	79.4	2.66	37.9	1.01		4.203	26.974	35.972	44.666	299
20	4.105	34.109	1.52	20.8	94.7	2.87	40.9	1.01		4.137	26.994	36.199	44.799	399
25	3.900	34.122	1.03	13.0	109.4	2.95	42.4	1.00		3.773	27.110	36.227	44.917	501
30	3.605	34.143	0.94	11.4	119.3	3.01	43.2	1.01		3.574	27.187	36.312	45.012	599
35	3.319	34.157	0.69	9.3	130.9	3.02	43.7	1.00		3.351	27.260	36.396	45.125	696
40	3.212	34.159	0.57	6.6	139.0	3.09	44.1	1.00		3.148	27.320	36.466	45.225	794
45	3.105	34.163	0.51	5.8	146.7	3.12	44.3	1.00		2.945	27.374	36.530	45.289	899
50	2.998	34.184	0.46	6.1	155.1	3.13	44.9	1.00		2.795	27.412	36.575	45.310	1002
55	2.719	34.463	0.44	5.9	166.2	3.17	45.2	1.00		2.435	27.506	36.638	45.460	1245
60	2.310	34.779	0.45	4.1	173.9	3.12	45.4	1.00		2.212	27.561	36.594	45.517	1494
65	2.003	34.953	0.46	11.2	180.7	3.06	44.4	1.00		1.993	27.625	36.819	45.513	1723
70	1.947	34.989	0.49	18.4	2.99	43.2	43.2	1.00		1.802	27.656	36.867	45.673	2225
75	1.946	34.912	0.77	25.4	191.9	2.87	41.4	1.00		1.725	27.713	36.942	45.719	2746
80	1.710	34.561	2.71	14.7	175.3	2.70	39.3	1.00		1.319	27.751	36.991	45.929	3465
85	1.490	34.676	3.15	40.3	170.8	2.61	38.1	1.00		1.201	27.771	37.128	45.951	3633
90	1.492	34.681	3.30	42.2	170.3		37.6	1.00		1.147	27.781	37.130	45.964	4253
95	1.265	34.697	3.39	43.2	175.7		37.4	1.00		1.126	27.795	37.136	45.973	4701
100	1.265	34.499	3.43	43.3	174.4	2.54	37.3	1.01		1.121	27.786	37.117	45.975	5144

# MARATHON 2 STA. 69

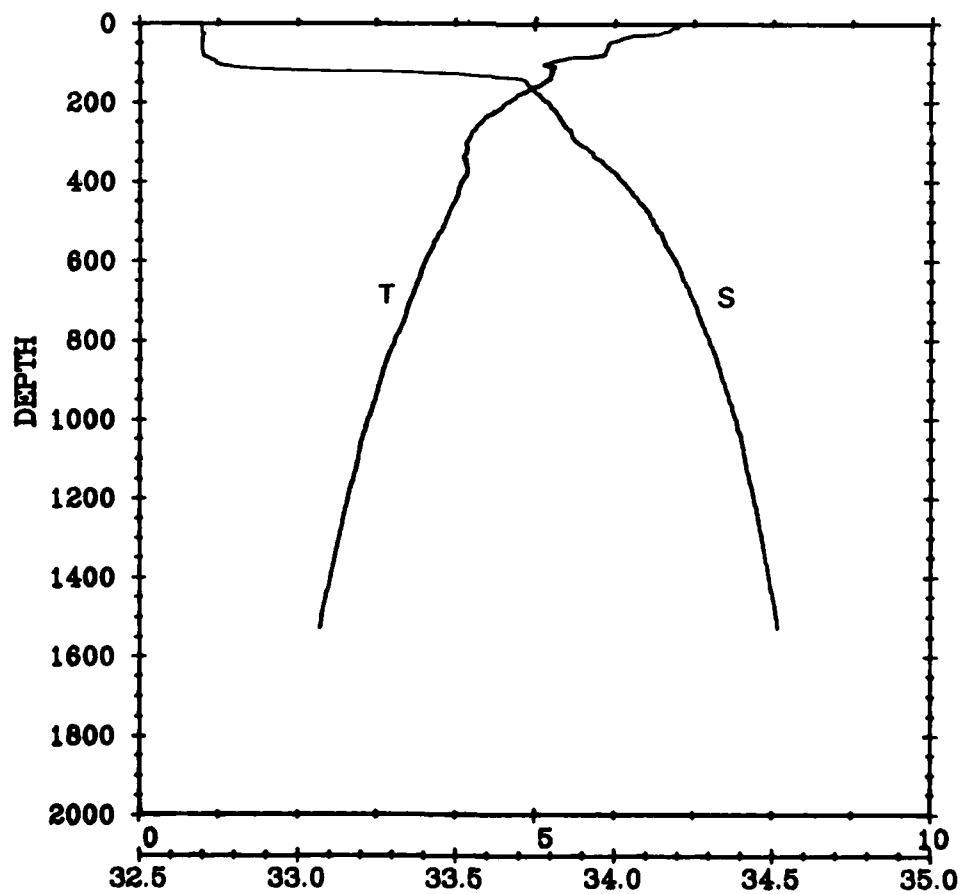
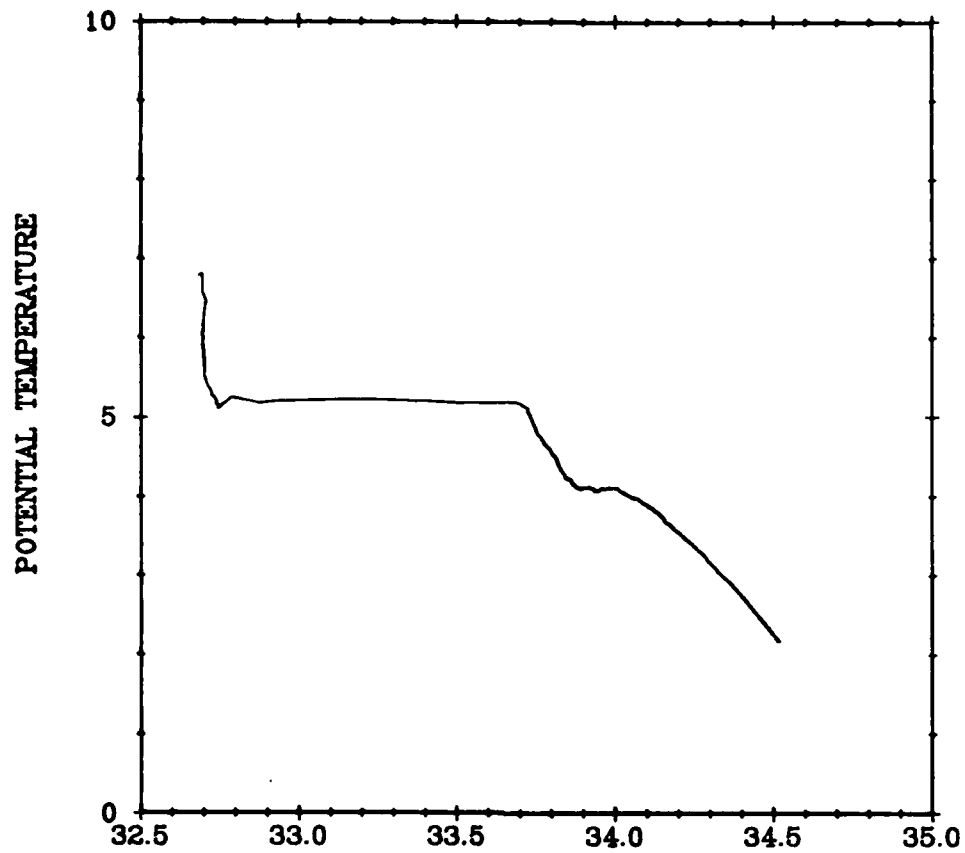


LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BATTEN	WIND	SPEED	AIR TEMP	WET WTR	RAIN
					GMT	N	DIR	KT	DEG F	CM	IN
41 00 N	141 09 56W	04	09	94	0144	0409	01	0	55	0	0.00

PRESS	DATA	CALINITY	PAT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG		DEG C				10 T N		M
1	5.747	32.583	4.184	25.430	14.618	43.247	244.374	1.001	1.00
2	5.539	32.593	4.537	25.561	14.613	43.247	244.374	1.001	1.00
3	5.539	32.593	4.537	25.561	14.613	43.247	244.374	1.001	1.00
4	5.539	32.593	4.537	25.561	14.613	43.247	244.374	1.001	1.00
5	5.529	32.592	4.532	25.551	14.613	43.247	244.374	1.001	1.00
6	5.521	32.587	4.525	25.555	14.610	43.247	244.374	1.001	1.00
7	5.534	32.591	4.539	25.548	14.614	43.247	244.374	1.001	1.00
8	4.549	33.737	4.693	25.755	15.922	44.676	247.124	1.002	1.03
9	4.521	33.837	4.155	26.930	13.923	44.602	247.124	1.002	1.03
10	4.417	33.891	4.126	26.993	13.995	44.692	247.124	1.002	1.03
11	4.419	33.854	4.193	26.946	13.988	44.746	247.122	1.002	1.03
12	4.392	34.124	4.154	27.134	14.119	44.814	247.122	1.002	1.03
13	3.999	34.253	3.957	27.155	16.192	44.895	247.122	1.002	1.03
14	3.974	34.262	3.939	27.133	16.226	44.903	247.124	1.002	1.03
15	3.919	34.151	3.477	27.185	14.101	45.017	247.121	1.002	1.03
16	3.911	34.246	3.382	27.249	14.151	45.011	247.120	1.002	1.03
17	3.233	34.236	3.179	27.307	16.782	45.123	247.124	1.002	1.03
18	3.255	34.318	2.954	27.157	15.511	45.237	247.127	1.002	1.03
19	2.955	34.179	2.939	27.404	16.556	45.319	247.125	1.002	1.03
20	2.767	34.411	2.592	27.442	16.511	45.311	247.125	1.002	1.03
21	2.639	34.419	2.359	27.475	16.604	45.447	247.124	1.002	1.03
22	2.527	34.462	2.441	27.416	15.635	45.459	247.125	1.002	1.03
23	2.420	34.495	2.327	27.413	16.121	45.449	247.132	1.002	1.03
24	2.359	34.553	2.219	27.542	16.755	45.519	247.135	1.002	1.03
25	2.272	34.513	2.159	27.572	16.779	45.533	247.132	1.002	1.03

WICKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 01	02 SAT	SIO3	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C	PROM	PROM	PROM	UMOL	UMOL	UMOL	UMOL	PROM	DEG C	PROM	PROM	PROM	DB
1	4.337	32.724	2.70	126.0	21.0	1.27	12.8	0.10	5.917	25.630	34.516	43.228	3	
5	4.437	32.720	2.73	104.2	20.9	1.20	13.3	0.10	5.933	25.744	34.713	43.403	31	
9	4.452	32.743	2.73	99.5	21.6	1.19	14.6	0.12	5.946	25.870	34.919	43.604	57	
126	5.198	33.454	5.4	80.5	33.3	1.72	22.4	0.04	5.198	26.428	35.493	44.136	126	
131	4.933	33.442	4.77	66.6	45.4	1.98	27.2	0.01	4.941	26.485	35.749	44.410	152	
137	4.664	33.720	3.95	53.6	55.6	2.24	31.2	0.01	4.649	26.748	35.824	44.695	159	
247	4.339	33.835	2.83	39.3	67.8	2.54	35.6	0.00	4.341	26.826	35.969	44.907	249	
297	4.121	33.870	2.13	29.2	80.2	2.73	39.5	0.01	4.100	26.893	35.996	44.694	299	
395	4.019	34.126	1.47	20.1	95.4	2.89	45.8	0.00	4.050	27.056	36.110	44.898	398	
497	3.974	34.122	1.11	15.1	128.3	2.97	42.1	0.01	3.939	27.104	36.217	44.924	514	
599	3.634	34.187	0.95	11.3	129.0	3.03	43.0	0.00	3.593	27.190	36.325	45.123	593	
697	3.481	34.248	0.72	9.7	125.4	3.07	43.5	0.00	3.394	27.249	36.394	45.112	693	
793	3.199	34.205	0.60	9.1	135.6	3.11	44.0	0.00	3.144	27.317	36.463	45.232	810	
899	3.140	34.344	0.52	7.7	140.0	3.13	44.4	0.00	2.979	27.363	36.519	45.264	916	
998	2.874	34.398	0.37	4.9	151.5	3.15	45.0	0.00	2.807	27.414	36.577	45.331	1007	
1241	2.571	34.455	0.34	4.5	163.2		45.4	0.00	2.488	27.495	36.574	45.444	1204	
1328	2.271	34.519	0.61	8.0	173.7		45.0	0.00	2.168	27.573	36.768	45.553	1354	

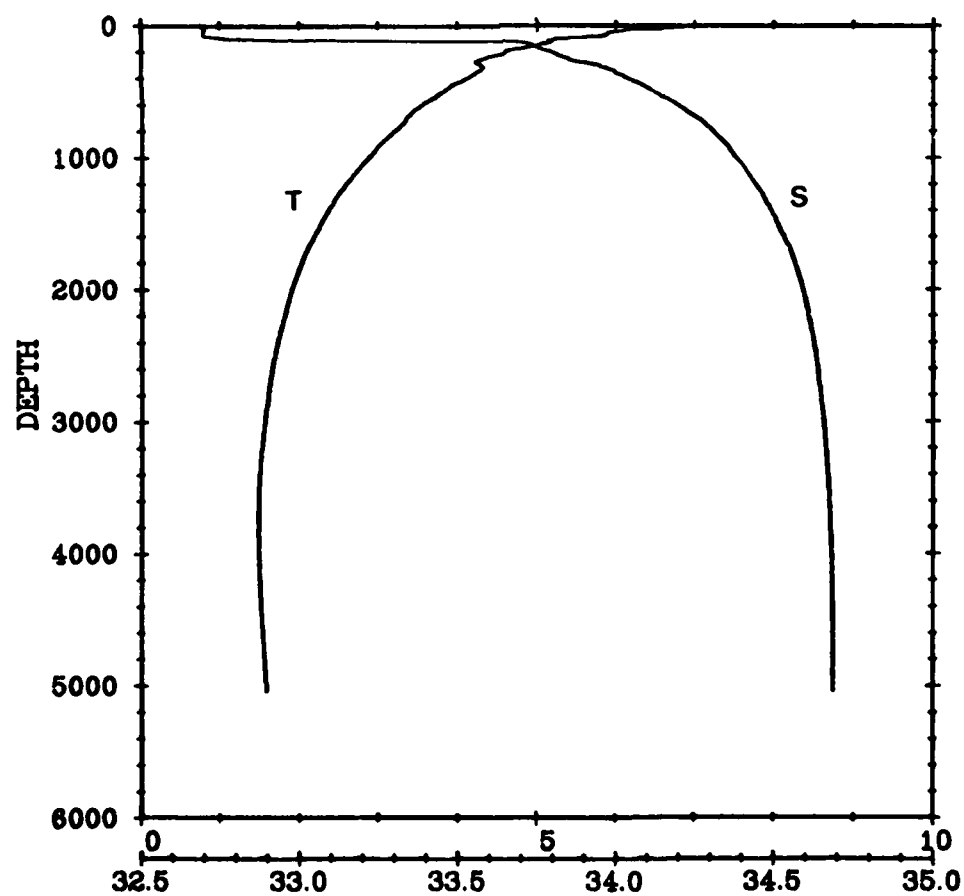
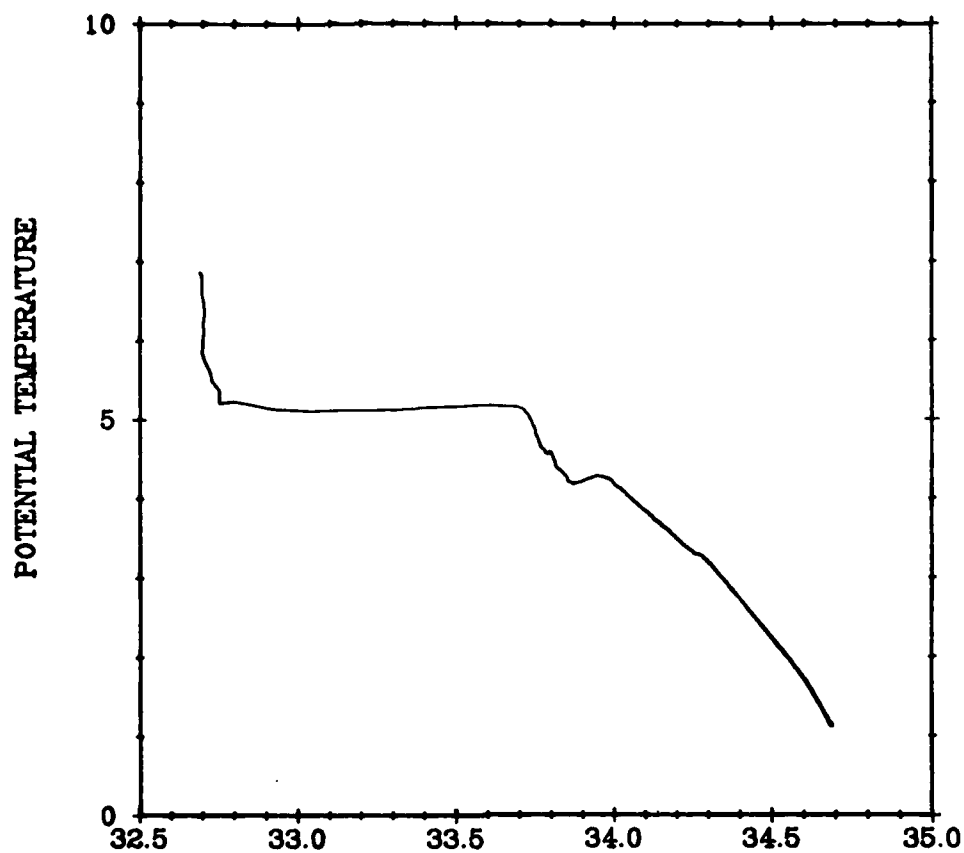
# MARATHON 2 STA. 70



WISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIG 02	02 SAT	SI01	P04	H03	N02	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 3	PRESS
M	DEG C		MML	%	UMOL	UMOL	UMOL	UMOL	TUMIN	DEG C				DB
1	6.457	32.735	1.36	106.9	44.7	1.24	12.6	1.13	9.357	25.629	34.614	41.202		
43	5.959	32.735	1.39	106.1	22.3	1.26	13.0	1.11	9.055	25.743	34.772	41.401	49	
49	5.199	32.739	1.14	99.3	23.1	1.24	14.3	1.12	5.742	25.971	34.743	41.512	99	
144	4.919	33.735	4.75	66.7	54.1	1.99	20.1	1.01	4.917	26.493	33.407	44.407	145	
211	4.512	33.810	3.33	46.1	64.7	2.36	33.4	1.01	4.517	26.785	33.268	44.429	212	
291	4.269	33.925	2.19	22.5	91.7	2.69	39.5	1.00	4.247	26.905	33.100	44.591	291	
335	4.158	34.049	1.40	19.2	93.5	2.87	45.6	1.07	4.117	27.127	33.101	44.830	336	
439	3.791	34.126	1.15	14.7	112.9	2.99	42.5	1.01	3.775	27.115	33.233	44.744	502	
499	3.154	34.195	0.82	11.0	127.7	3.03	42.8	1.00	3.013	27.194	33.323	45.145	604	
495	3.175	34.257	0.70	9.4	126.9	3.07	44.0	1.00	3.127	27.262	33.149	45.129	721	
499	3.127	34.319	0.69	7.4	115.9	3.08	44.5	1.00	3.162	27.118	33.463	45.201	806	
597	2.739	34.350	0.45	6.0	116.4	3.14	45.0	1.00	2.719	27.169	33.523	45.269	906	
496	2.555	34.398	0.44	5.6	131.9	3.14	45.2	1.00	2.489	27.415	33.578	45.331	1006	
1292	2.524	34.461	0.44	5.9	150.7	3.15	45.3	1.00	2.441	27.504	33.585	45.451	1254	
1419	2.287	34.514	0.41	5.1	171.2	3.12	46.7	1.00	2.179	27.668	33.763	45.711	1514	
1741	2.151	34.595	0.32	11.7	175.4	3.10	44.2	1.00	2.153	27.623	33.929	45.925	1714	
1987	1.92	34.695	0.17	21.3	193.2	2.98	43.6	1.00	1.791	27.659	33.855	45.679	2037	
2217	1.53	34.610	0.17	21.3	191.1	2.91	42.0	1.00	1.649	27.690	33.673	45.721	2266	
2495	1.697	34.635	0.17	25.4	191.9	2.93	41.4	1.00	1.520	27.716	33.945	45.762	2529	
2991	1.566	34.659	0.13	32.3	191.7	3.19	37.7	1.00	1.345	27.748	33.986	45.812	3025	
3491	1.485	34.676	0.10	37.7	173.1	2.61	39.3	1.00	1.216	27.770	37.016	45.948	3536	
3711	1.479	34.694	0.10	41.9	179.4	2.67	37.7	1.00	1.177	27.791	37.030	45.965	4039	
4457	1.109	34.687	0.14	42.7	192.1	2.67	37.5	1.00	1.107	27.794	37.035	45.971	4549	
5144	1.181	34.693	0.40	43.5	193.1	2.57	37.4	1.00	1.127	27.797	37.037	45.974	5144	



# MARATHON 2 STA. 71



LATITUDE LONGITUDE MO DY YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAR M  
 41 57 N 121 59 W 8 27 84 1256 1444 250 18 6.1 1.6 1014.6

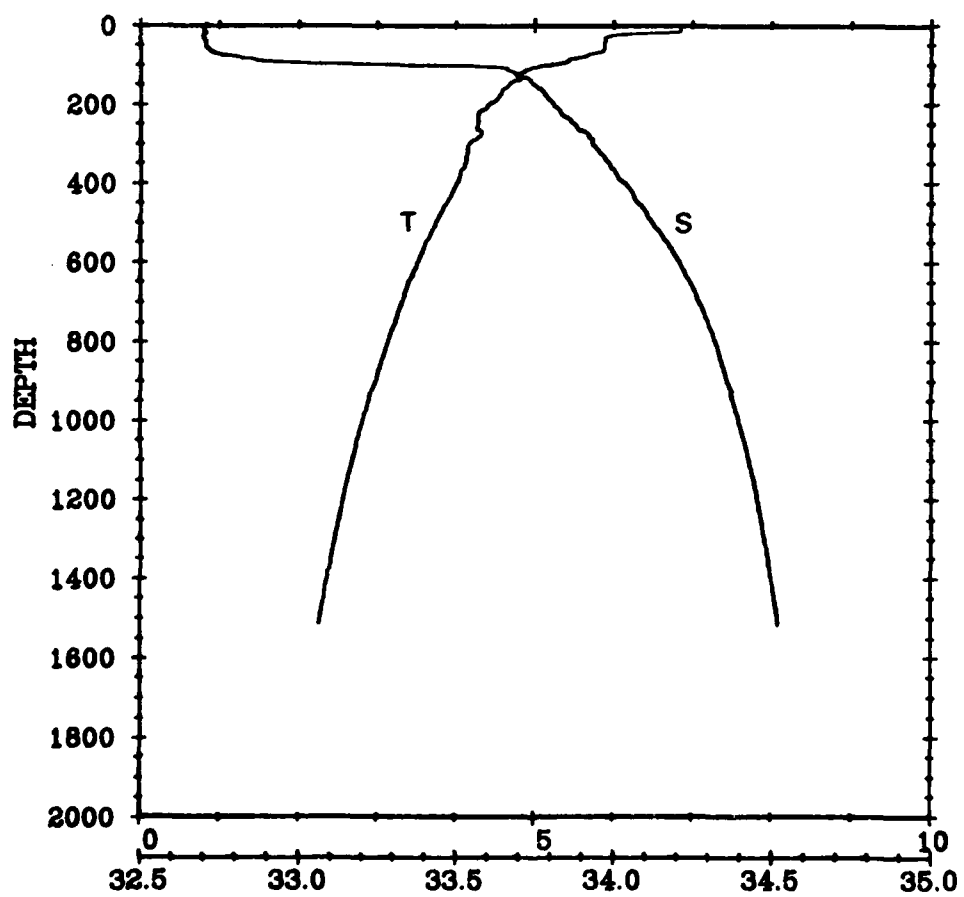
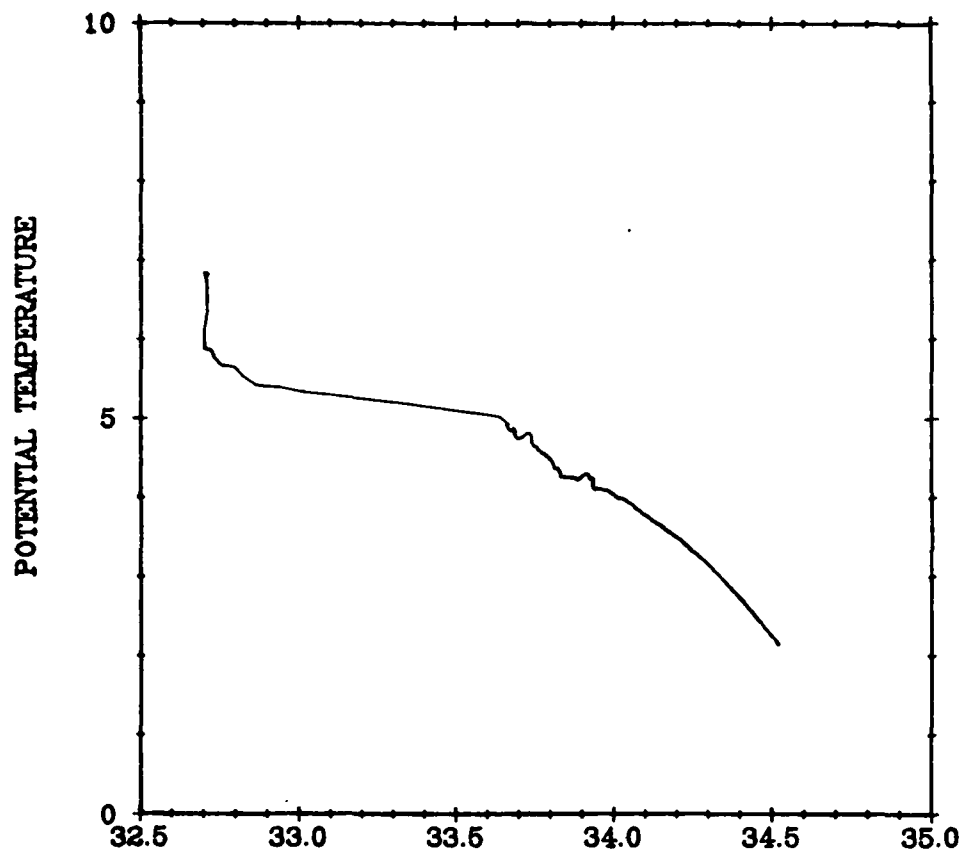
## STD DATA

DEPTH	PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
M	DB	DEG C		DEG C				CTD		M
1	1.947	12.105	35.847	25.632	14.517	41.215	234.672	1.147	1.147	1
2	1.940	12.105	35.839	25.631	14.517	41.217	229.221	1.146	1.146	2
3	1.933	12.106	35.830	25.624	14.516	41.217	223.541	1.145	1.145	3
4	1.941	12.113	35.856	25.647	14.512	41.211	222.421	1.135	1.135	4
5	1.913	12.117	35.837	25.654	14.513	41.217	213.248	1.131	1.131	5
6	1.924	12.123	35.815	25.656	14.513	41.217	213.248	1.131	1.131	6
7	1.935	12.127	35.837	25.657	14.513	41.217	213.248	1.131	1.131	7
8	1.946	12.133	35.859	25.658	14.513	41.217	213.248	1.131	1.131	8
9	1.957	12.139	35.881	25.659	14.513	41.217	213.248	1.131	1.131	9
10	1.968	12.145	35.903	25.660	14.513	41.217	213.248	1.131	1.131	10
11	1.979	12.151	35.925	25.661	14.513	41.217	213.248	1.131	1.131	11
12	1.990	12.157	35.947	25.662	14.513	41.217	213.248	1.131	1.131	12
13	2.001	12.163	35.969	25.663	14.513	41.217	213.248	1.131	1.131	13
14	2.012	12.169	35.991	25.664	14.513	41.217	213.248	1.131	1.131	14
15	2.023	12.175	36.013	25.665	14.513	41.217	213.248	1.131	1.131	15
16	2.034	12.181	36.035	25.666	14.513	41.217	213.248	1.131	1.131	16
17	2.045	12.187	36.057	25.667	14.513	41.217	213.248	1.131	1.131	17
18	2.056	12.193	36.079	25.668	14.513	41.217	213.248	1.131	1.131	18
19	2.067	12.199	36.101	25.669	14.513	41.217	213.248	1.131	1.131	19
20	2.078	12.205	36.123	25.670	14.513	41.217	213.248	1.131	1.131	20
21	2.089	12.211	36.145	25.671	14.513	41.217	213.248	1.131	1.131	21
22	2.100	12.217	36.167	25.672	14.513	41.217	213.248	1.131	1.131	22
23	2.111	12.223	36.189	25.673	14.513	41.217	213.248	1.131	1.131	23
24	2.122	12.229	36.211	25.674	14.513	41.217	213.248	1.131	1.131	24
25	2.133	12.235	36.233	25.675	14.513	41.217	213.248	1.131	1.131	25
26	2.144	12.241	36.255	25.676	14.513	41.217	213.248	1.131	1.131	26
27	2.155	12.247	36.277	25.677	14.513	41.217	213.248	1.131	1.131	27
28	2.166	12.253	36.299	25.678	14.513	41.217	213.248	1.131	1.131	28
29	2.177	12.259	36.321	25.679	14.513	41.217	213.248	1.131	1.131	29
30	2.188	12.265	36.343	25.680	14.513	41.217	213.248	1.131	1.131	30
31	2.199	12.271	36.365	25.681	14.513	41.217	213.248	1.131	1.131	31
32	2.210	12.277	36.387	25.682	14.513	41.217	213.248	1.131	1.131	32
33	2.221	12.283	36.409	25.683	14.513	41.217	213.248	1.131	1.131	33
34	2.232	12.289	36.431	25.684	14.513	41.217	213.248	1.131	1.131	34
35	2.243	12.295	36.453	25.685	14.513	41.217	213.248	1.131	1.131	35
36	2.254	12.301	36.475	25.686	14.513	41.217	213.248	1.131	1.131	36
37	2.265	12.307	36.497	25.687	14.513	41.217	213.248	1.131	1.131	37
38	2.276	12.313	36.519	25.688	14.513	41.217	213.248	1.131	1.131	38
39	2.287	12.319	36.541	25.689	14.513	41.217	213.248	1.131	1.131	39
40	2.298	12.325	36.563	25.690	14.513	41.217	213.248	1.131	1.131	40
41	2.309	12.331	36.585	25.691	14.513	41.217	213.248	1.131	1.131	41
42	2.320	12.337	36.607	25.692	14.513	41.217	213.248	1.131	1.131	42
43	2.331	12.343	36.629	25.693	14.513	41.217	213.248	1.131	1.131	43
44	2.342	12.349	36.651	25.694	14.513	41.217	213.248	1.131	1.131	44
45	2.353	12.355	36.673	25.695	14.513	41.217	213.248	1.131	1.131	45
46	2.364	12.361	36.695	25.696	14.513	41.217	213.248	1.131	1.131	46
47	2.375	12.367	36.717	25.697	14.513	41.217	213.248	1.131	1.131	47
48	2.386	12.373	36.739	25.698	14.513	41.217	213.248	1.131	1.131	48
49	2.397	12.379	36.761	25.699	14.513	41.217	213.248	1.131	1.131	49
50	2.408	12.385	36.783	25.700	14.513	41.217	213.248	1.131	1.131	50
51	2.419	12.391	36.805	25.701	14.513	41.217	213.248	1.131	1.131	51
52	2.430	12.397	36.827	25.702	14.513	41.217	213.248	1.131	1.131	52
53	2.441	12.403	36.849	25.703	14.513	41.217	213.248	1.131	1.131	53
54	2.452	12.409	36.871	25.704	14.513	41.217	213.248	1.131	1.131	54
55	2.463	12.415	36.893	25.705	14.513	41.217	213.248	1.131	1.131	55
56	2.474	12.421	36.915	25.706	14.513	41.217	213.248	1.131	1.131	56
57	2.485	12.427	36.937	25.707	14.513	41.217	213.248	1.131	1.131	57
58	2.496	12.433	36.959	25.708	14.513	41.217	213.248	1.131	1.131	58
59	2.507	12.439	36.981	25.709	14.513	41.217	213.248	1.131	1.131	59
60	2.518	12.445	37.003	25.710	14.513	41.217	213.248	1.131	1.131	60
61	2.529	12.451	37.025	25.711	14.513	41.217	213.248	1.131	1.131	61
62	2.540	12.457	37.047	25.712	14.513	41.217	213.248	1.131	1.131	62
63	2.551	12.463	37.069	25.713	14.513	41.217	213.248	1.131	1.131	63
64	2.562	12.469	37.091	25.714	14.513	41.217	213.248	1.131	1.131	64
65	2.573	12.475	37.113	25.715	14.513	41.217	213.248	1.131	1.131	65
66	2.584	12.481	37.135	25.716	14.513	41.217	213.248	1.131	1.131	66
67	2.595	12.487	37.157	25.717	14.513	41.217	213.248	1.131	1.131	67
68	2.606	12.493	37.179	25.718	14.513	41.217	213.248	1.131	1.131	68
69	2.617	12.499	37.201	25.719	14.513	41.217	213.248	1.131	1.131	69
70	2.628	12.505	37.223	25.720	14.513	41.217	213.248	1.131	1.131	70
71	2.639	12.511	37.245	25.721	14.513	41.217	213.248	1.131	1.131	71
72	2.650	12.517	37.267	25.722	14.513	41.217	213.248	1.131	1.131	72
73	2.661	12.523	37.289	25.723	14.513	41.217	213.248	1.131	1.131	73
74	2.672	12.529	37.311	25.724	14.513	41.217	213.248	1.131	1.131	74
75	2.683	12.535	37.333	25.725	14.513	41.217	213.248	1.131	1.131	75
76	2.694	12.541	37.355	25.726	14.513	41.217	213.248	1.131	1.131	76
77	2.705	12.547	37.377	25.727	14.513	41.217	213.248	1.131	1.131	77
78	2.716	12.553	37.399	25.728	14.513	41.217	213.248	1.131	1.131	78
79	2.727	12.559	37.421	25.729	14.513	41.217	213.248	1.131	1.131	79
80	2.738	12.565	37.443	25.730	14.513	41.217	213.248	1.131	1.131	80
81	2.749	12.571	37.465	25.731	14.513	41.217	213.248	1.131	1.131	81
82	2.760	12.577	37.487	25.732	14.513	41.217	213.248	1.131	1.131	82
83	2.771	12.583	37.509	25.733	14.513	41.217	213.248	1.131	1.131	83
84	2.782	12.589	37.531	25.734	14.513	41.217	213.248	1.131	1.131	84
85	2.793	12.595	37.553	25.735	14.513	41.217	213.248	1.131	1.131	85
86	2.804	12.601	37.575	25.736	14.513	41.217	213.248	1.131	1.131	86
87	2.815	12.607	37.597	25.737	14.513	41.217	213.248	1.131	1.131	87
88	2.826	12.613	37.619	25.738	14.513	41.217	213.248	1.131	1.131	88
89	2.837	12.619	37.641	25.739	14.513	41.217	213.248	1.131	1.131	89
90	2.848	12.625	37.663	25.740	14.513	41.217	213.248	1.131	1.131	90
91	2.859	12.631	37.685	25.741	14.513	41.217	213.248	1.131	1.131	91
92	2.870	12.637	37.707	25.742	14.513	41.217	213.248	1.131	1.131	92
93	2.881	12.643	37.729	25.743	14.513	41.217	213.248	1.131	1.131	93
94	2.892	12.649	37.751	25.744	14.513	41.217	213.248	1.131	1.131	94
95	2.903	12.655	37.773	25.745	14.513	41.217	213.248	1.131	1.131	95
96	2.914	12.661	37.795	25.746	14.513	41.217	213.248	1.131	1.131	96
97	2.925	12.667	37.817	25.747	14.513	41.217	213.248	1.131	1.131	97
98	2.936	12.673	37.839	25.748	14.513	41.217	213.248	1.131	1.131	98
99	2.947	12.679	37.861	25.749	14.513	41.217	213.248	1.131	1.131	99
100	2.958	12.685	37.883	25.750	14.513	41.217	213.248	1.131	1.131	100

## NICKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	O2 SAT	SIGMA T	POT	NO3	NO2	TRIT	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L		UM/L	UM/L	UM/L	TURB	DEG C				DB
1	12.105	35.847	106.3	22.2	1.23	12.5							

# MARATHON 2 STA. 73

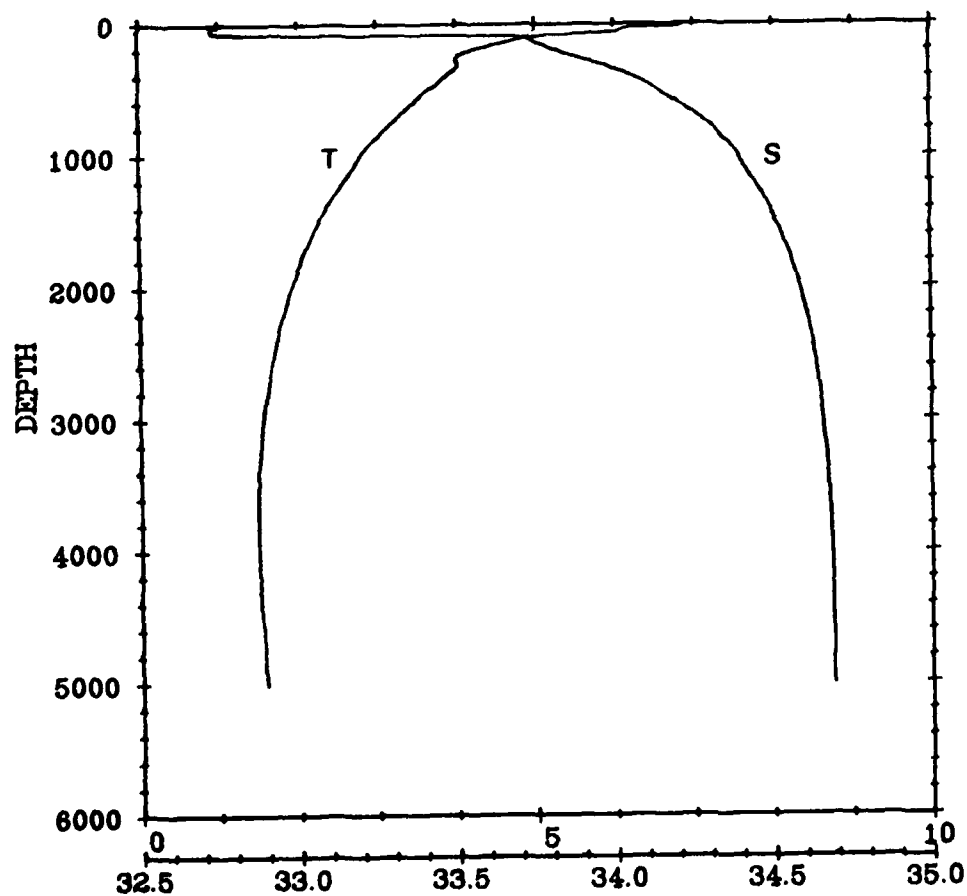
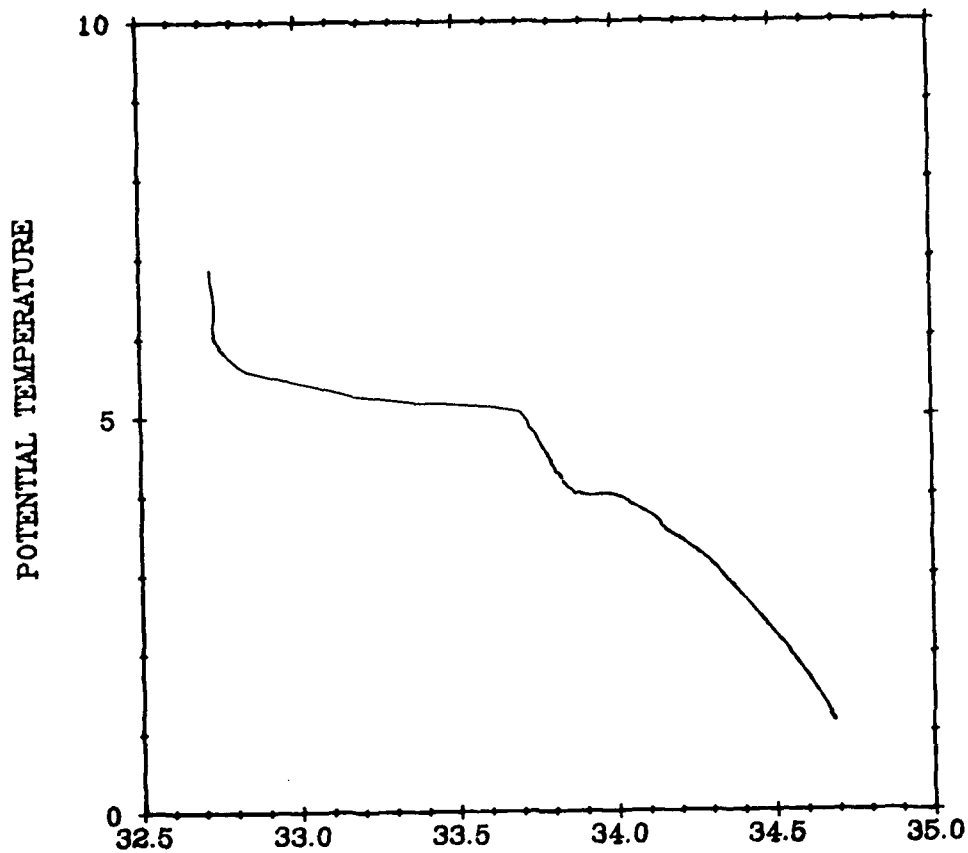


LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTLE	WIND	SPEED	AIR TEMP	WET BULB	BAROM
41 41.00 N	141 19.00 W	5	27	94	1924	5019	200	KT	DEG C	DEG C	1019.0

STD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
1	5.977	32.124	5.977	25.643	34.627	43.213	222.427	1.022	1
20	5.972	32.125	5.970	25.655	34.642	43.212	222.799	1.047	19
40	5.970	32.125	5.968	25.667	34.657	43.199	223.193	1.072	39
60	5.968	32.141	5.968	25.665	34.659	43.144	222.701	1.097	59
80	5.965	32.970	5.949	25.604	37.049	43.492	220.247	1.122	79
100	5.962	37.650	5.917	25.602	37.112	44.037	242.647	1.214	99
120	4.999	37.772	4.989	25.643	37.928	44.604	177.245	1.282	119
140	4.245	37.922	4.256	25.923	38.939	44.602	123.479	1.345	139
160	4.245	37.933	4.229	25.935	38.952	44.577	117.217	1.406	159
180	4.218	37.952	4.217	25.952	38.952	44.559	112.162	1.463	179
200	4.203	34.220	4.191	27.122	38.125	44.812	107.735	1.519	199
220	3.994	34.220	3.965	27.122	38.125	44.812	107.735	1.571	219
240	3.787	34.102	3.754	27.145	38.203	44.924	99.628	1.621	239
260	3.574	34.178	3.540	27.167	38.280	44.977	96.102	1.671	259
280	3.497	34.203	3.449	27.207	38.339	45.164	99.990	1.740	279
300	3.301	34.248	3.256	27.277	38.428	45.152	93.890	1.810	299
320	3.119	34.100	3.065	27.335	38.487	45.229	78.704	1.902	319
340	2.942	34.150	2.892	27.385	38.544	45.296	74.514	1.978	339
360	2.798	34.394	2.732	27.425	38.593	45.351	71.331	2.091	359
380	2.755	34.416	2.672	27.452	38.624	45.387	68.945	2.151	379
400	2.693	34.442	2.619	27.493	38.661	45.430	66.339	2.219	399
420	2.471	34.453	2.397	27.514	38.699	45.473	63.574	2.284	419
440	2.362	34.492	2.270	27.543	38.734	45.544	61.166	2.346	439
460	2.287	34.510	2.191	27.565	38.760	45.544	59.394	2.406	459
480	2.247	34.529	2.151	27.596	38.786	45.575	57.391	2.465	479
500	2.220	34.545	2.127	27.607	38.811	45.604	55.883	2.522	499
520	2.149	34.567	1.928	27.625	38.873	45.630	54.253	2.577	519
540	1.987	34.577	1.859	27.644	38.853	45.653	53.044	2.615	539
560	1.932	34.584	1.797	27.654	38.869	45.672	52.022	2.653	559
580	1.875	34.597	1.732	27.663	38.896	45.693	50.974	2.704	579
600	1.829	34.604	1.678	27.679	38.911	45.710	50.147	2.755	599
620	1.779	34.624	1.625	27.692	38.917	45.720	49.979	2.804	619
640	1.714	34.622	1.568	27.702	38.929	45.744	49.240	2.893	639
660	1.704	34.628	1.530	27.709	38.939	45.755	47.766	2.931	659
680	1.666	34.605	1.493	27.719	38.930	45.769	47.175	2.979	679
700	1.637	34.642	1.445	27.726	38.960	45.780	46.575	2.925	699
720	1.611	34.645	1.411	27.733	38.968	45.741	46.174	2.972	719
740	1.591	34.681	1.392	27.739	38.976	45.801	45.344	2.918	739
760	1.567	34.655	1.349	27.744	38.991	45.809	45.222	2.913	759
780	1.546	34.639	1.319	27.757	38.990	45.821	45.231	2.929	779
800	1.524	34.663	1.298	27.755	38.997	45.826	44.911	2.954	799
820	1.512	34.665	1.256	27.759	37.102	45.832	44.908	2.999	819
840	1.497	34.659	1.243	27.765	37.107	45.838	44.689	2.941	839
860	1.491	34.671	1.225	27.767	37.111	45.843	44.690	2.999	859
880	1.492	34.674	1.206	27.770	37.105	45.849	44.679	2.943	879
900	1.491	34.675	1.195	27.773	37.109	45.854	44.710	2.977	899
920	1.479	34.677	1.182	27.773	37.121	45.856	44.713	2.922	919
940	1.492	34.690	1.164	27.777	37.126	45.861	45.413	2.972	939
960	1.485	34.692	1.156	27.779	37.129	45.864	45.414	2.978	959
980	1.492	34.692	1.151	27.780	37.129	45.865	45.769	3.020	979
1000	1.497	34.693	1.145	27.782	37.131	45.867	46.035	2.979	999
1020	1.526	34.684	1.142	27.782	37.132	45.869	46.370	2.935	1019
1040	1.501	34.695	1.138	27.783	37.133	45.870	46.673	2.942	1039
1060	1.541	34.695	1.136	27.783	37.134	45.870	47.097	2.899	1059
1080	1.512	34.695	1.133	27.783	37.134	45.871	47.507	2.916	1079
1100	1.541	34.696	1.129	27.784	37.135	45.872	47.948	2.994	1099
1120	1.562	34.597	1.128	27.785	37.136	45.873	48.225	3.032	1119
1140	1.563	34.687	1.127	27.785	37.136	45.873	48.475	3.091	1139
1160	1.575	34.597	1.126	27.785	37.136	45.873	49.144	3.129	1159
1180	1.576	34.597	1.125	27.785	37.136	45.873	49.193	3.135	1179

NISKIN BOTTLE DATA														
DEPTH M	TEMP DEG C	SALINITY	DIS O2 ML/L	O2 SAT	SI03 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUSIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
1	5.938	32.717	7.25	105.5	20.5	1.23	12.5	0.11	5.938	25.645	34.625	43.209		1
19	5.939	32.714	7.26	105.6	21.4	1.23	12.5	0.11	5.897	25.648	34.631	43.216		18
39	5.933	32.740			21.4	1.25	13.1	0.10	6.049	25.761	34.784	43.408		31
59	5.109	33.672	5.07	71.1	42.4	1.36	25.7	0.04	5.100	25.611	35.667	44.321		103
79	4.645	33.767	3.92	54.4	57.2	2.21	31.0	0.01	4.634	25.739	35.916	44.491		157
99	4.364	33.806	3.09	42.4	67.5	2.45	34.6	0.00	4.350	25.800	35.892	44.579		202
119	4.029	33.912	1.89	25.3	86.6	2.76	39.7	0.00	4.008	26.920	36.127	44.729		298
139	3.457	34.037	1.11	17.9	99.4	2.71	41.5	0.00	3.929	27.027	36.137	44.841		399
159	3.724	34.136	0.90	12.2	114.5	2.98	42.9	0.00	3.669	27.132	36.254	44.969		509
179	3.467	34.212	0.73	9.9	123.5	3.03	43.4	0.00	3.426	27.216	36.349	45.075		608
199	3.311	34.263	0.67	9.1	131.1	3.03	43.9	0.00	3.269	27.272	36.412	45.146		704
219	3.125	34.321	0.57	7.6	138.9	3.06	44.2	0.00	3.071	27.336	36.497	45.229		805
239	2.974	34.355	0.50	5.7	142.5	3.09	44.5	0.00	2.911	27.379	36.536	45.285		910
259	2.817	34.391	0.46	5.1	149.1	3.10	44.7	0.00	2.740	27.421	36.597	45.347		1019
279	2.627	34.458	0.43	5.7	160.6	3.12	45.1	0.00	2.445	27.501	36.693	45.454		1247
299	2.432	34.512	0.51	7.3	170.8	3.19	45.0	0.00	2.132	27.565	36.761	45.547		1510
319	2.253	34.552	0.93	10.9	176.5	3.23	44.4	0.00	1.995	27.614	36.819	45.613		1759
339	1.912	34.587	1.27	15.7	176.5	2.47	43.4	0.00	1.795	27.656	36.971	45.675		2023
359	1.595	34.612	1.97	25.4	179.9	2.93	41.2	0.00	1.519	27.713	36.948	45.752		2513
379	1.573	34.635	2.52	32.4	174.5	2.72	39.8	0.00	1.360	27.743	36.981	45.806		2941
399	1.487	34.675	3.07	39.3	148.0	2.41	39.1	0.00	1.220	27.769	37.115	45.847		3508
419	1.491	34.692	3.25	41.5	171.2		37.7	0.00	1.261	27.779	37.128	45.851		4013
439	1.511	34.696	3.34	42.7	171.3		37.6	0.00	1.261	27.784	37.134	45.871		4518
459	1.576	34.699	3.40	43.4	171.6	2.73	37.5	0.00	1.126	27.795	37.137	45.874		5111

# MARATHON 2 STA. 74



R/V THOMAS WASHINGTON MARATHON LEI 11 STATION 1

LATITUDE LONGITUDE HT BY VR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB HUMIDITY  
 49 52.2N 150 11.0W 4.28 24 274 478 200 10 20.0 18.0 100.0

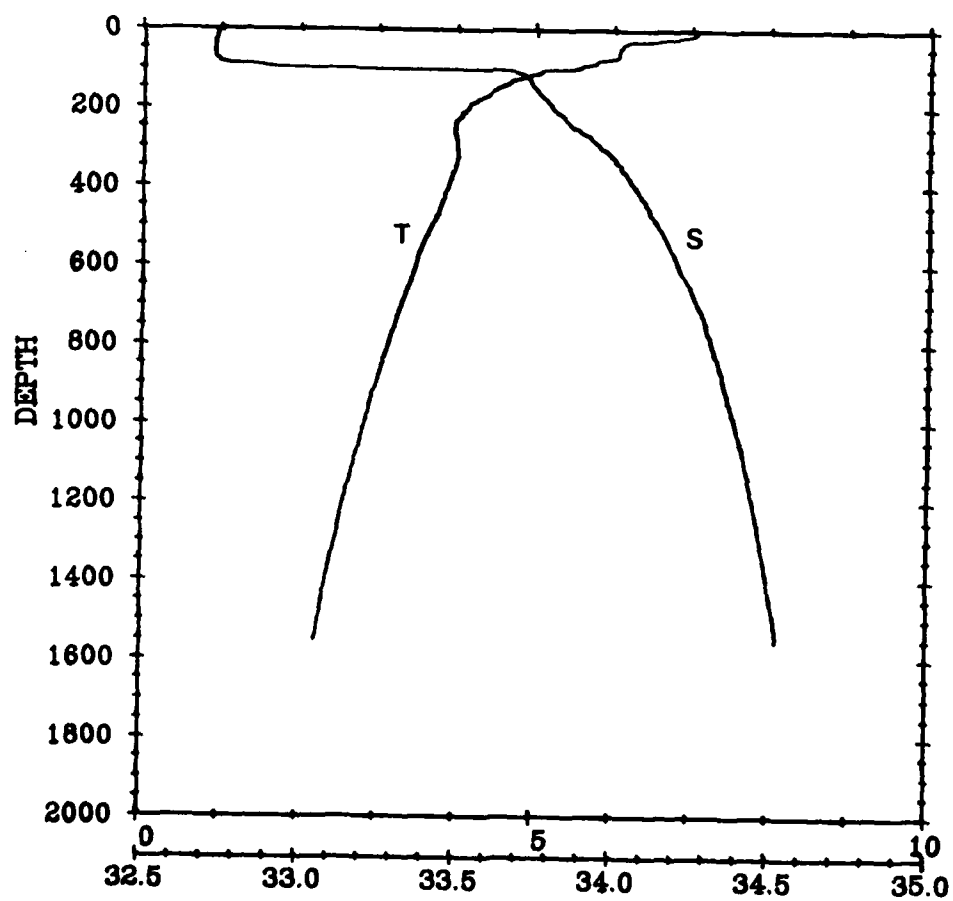
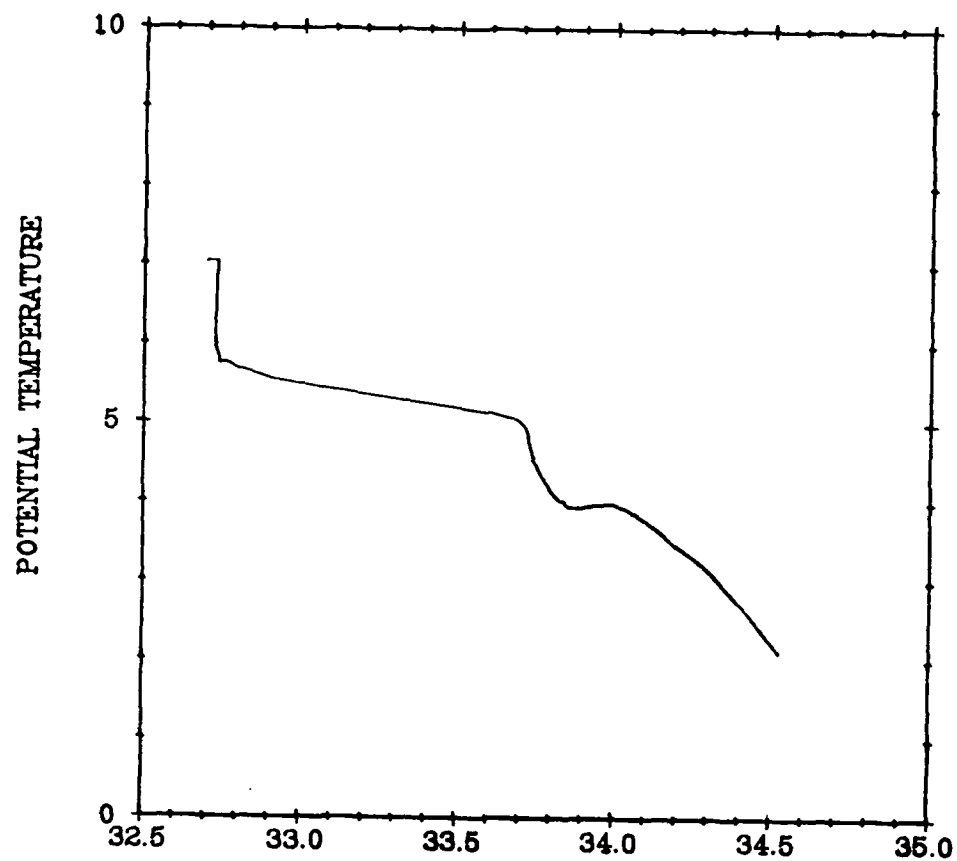
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA T	SIGMA T	SIGMA T	DYNAMIC HT	DEPTH
DB	DEG C		DEG C					M	
2	17.29	34.745	17.29	25.619	44.399	43.179	43.179	1.100	2
10	17.42	34.751	17.42	25.634	44.403	43.242	43.242	1.100	10
20	17.55	34.757	17.55	25.649	44.407	43.305	43.305	1.100	20
30	17.68	34.763	17.68	25.664	44.411	43.368	43.368	1.100	30
40	17.81	34.769	17.81	25.679	44.415	43.431	43.431	1.100	40
50	17.94	34.775	17.94	25.694	44.419	43.494	43.494	1.100	50
60	18.07	34.781	18.07	25.709	44.423	43.557	43.557	1.100	60
70	18.20	34.787	18.20	25.724	44.427	43.620	43.620	1.100	70
80	18.33	34.793	18.33	25.739	44.431	43.683	43.683	1.100	80
90	18.46	34.799	18.46	25.754	44.435	43.746	43.746	1.100	90
100	18.59	34.805	18.59	25.769	44.439	43.809	43.809	1.100	100
110	18.72	34.811	18.72	25.784	44.443	43.872	43.872	1.100	110
120	18.85	34.817	18.85	25.799	44.447	43.935	43.935	1.100	120
130	18.98	34.823	18.98	25.814	44.451	43.998	43.998	1.100	130
140	19.11	34.829	19.11	25.829	44.455	44.061	44.061	1.100	140
150	19.24	34.835	19.24	25.844	44.459	44.124	44.124	1.100	150
160	19.37	34.841	19.37	25.859	44.463	44.187	44.187	1.100	160
170	19.50	34.847	19.50	25.874	44.467	44.250	44.250	1.100	170
180	19.63	34.853	19.63	25.889	44.471	44.313	44.313	1.100	180
190	19.76	34.859	19.76	25.904	44.475	44.376	44.376	1.100	190
200	19.89	34.865	19.89	25.919	44.479	44.439	44.439	1.100	200
210	20.02	34.871	20.02	25.934	44.483	44.502	44.502	1.100	210
220	20.15	34.877	20.15	25.949	44.487	44.565	44.565	1.100	220
230	20.28	34.883	20.28	25.964	44.491	44.628	44.628	1.100	230
240	20.41	34.889	20.41	25.979	44.495	44.691	44.691	1.100	240
250	20.54	34.895	20.54	25.994	44.499	44.754	44.754	1.100	250
260	20.67	34.901	20.67	26.009	44.503	44.817	44.817	1.100	260
270	20.80	34.907	20.80	26.024	44.507	44.880	44.880	1.100	270
280	20.93	34.913	20.93	26.039	44.511	44.943	44.943	1.100	280
290	21.06	34.919	21.06	26.054	44.515	45.006	45.006	1.100	290
300	21.19	34.925	21.19	26.069	44.519	45.069	45.069	1.100	300
310	21.32	34.931	21.32	26.084	44.523	45.132	45.132	1.100	310
320	21.45	34.937	21.45	26.099	44.527	45.195	45.195	1.100	320
330	21.58	34.943	21.58	26.114	44.531	45.258	45.258	1.100	330
340	21.71	34.949	21.71	26.129	44.535	45.321	45.321	1.100	340
350	21.84	34.955	21.84	26.144	44.539	45.384	45.384	1.100	350
360	21.97	34.961	21.97	26.159	44.543	45.447	45.447	1.100	360
370	22.10	34.967	22.10	26.174	44.547	45.510	45.510	1.100	370
380	22.23	34.973	22.23	26.189	44.551	45.573	45.573	1.100	380
390	22.36	34.979	22.36	26.204	44.555	45.636	45.636	1.100	390
400	22.49	34.985	22.49	26.219	44.559	45.699	45.699	1.100	400
410	22.62	34.991	22.62	26.234	44.563	45.762	45.762	1.100	410
420	22.75	34.997	22.75	26.249	44.567	45.825	45.825	1.100	420
430	22.88	35.003	22.88	26.264	44.571	45.888	45.888	1.100	430
440	23.01	35.009	23.01	26.279	44.575	45.951	45.951	1.100	440
450	23.14	35.015	23.14	26.294	44.579	46.014	46.014	1.100	450
460	23.27	35.021	23.27	26.309	44.583	46.077	46.077	1.100	460
470	23.40	35.027	23.40	26.324	44.587	46.140	46.140	1.100	470
480	23.53	35.033	23.53	26.339	44.591	46.203	46.203	1.100	480
490	23.66	35.039	23.66	26.354	44.595	46.266	46.266	1.100	490
500	23.79	35.045	23.79	26.369	44.599	46.329	46.329	1.100	500
510	23.92	35.051	23.92	26.384	44.603	46.392	46.392	1.100	510
520	24.05	35.057	24.05	26.399	44.607	46.455	46.455	1.100	520
530	24.18	35.063	24.18	26.414	44.611	46.518	46.518	1.100	530
540	24.31	35.069	24.31	26.429	44.615	46.581	46.581	1.100	540
550	24.44	35.075	24.44	26.444	44.619	46.644	46.644	1.100	550
560	24.57	35.081	24.57	26.459	44.623	46.707	46.707	1.100	560
570	24.70	35.087	24.70	26.474	44.627	46.770	46.770	1.100	570
580	24.83	35.093	24.83	26.489	44.631	46.833	46.833	1.100	580
590	24.96	35.099	24.96	26.504	44.635	46.896	46.896	1.100	590
600	25.09	35.105	25.09	26.519	44.639	46.959	46.959	1.100	600
610	25.22	35.111	25.22	26.534	44.643	47.022	47.022	1.100	610
620	25.35	35.117	25.35	26.549	44.647	47.085	47.085	1.100	620
630	25.48	35.123	25.48	26.564	44.651	47.148	47.148	1.100	630
640	25.61	35.129	25.61	26.579	44.655	47.211	47.211	1.100	640
650	25.74	35.135	25.74	26.594	44.659	47.274	47.274	1.100	650
660	25.87	35.141	25.87	26.609	44.663	47.337	47.337	1.100	660
670	26.00	35.147	26.00	26.624	44.667	47.400	47.400	1.100	670
680	26.13	35.153	26.13	26.639	44.671	47.463	47.463	1.100	680
690	26.26	35.159	26.26	26.654	44.675	47.526	47.526	1.100	690
700	26.39	35.165	26.39	26.669	44.679	47.589	47.589	1.100	700
710	26.52	35.171	26.52	26.684	44.683	47.652	47.652	1.100	710
720	26.65	35.177	26.65	26.699	44.687	47.715	47.715	1.100	720
730	26.78	35.183	26.78	26.714	44.691	47.778	47.778	1.100	730
740	26.91	35.189	26.91	26.729	44.695	47.841	47.841	1.100	740
750	27.04	35.195	27.04	26.744	44.699	47.904	47.904	1.100	750
760	27.17	35.201	27.17	26.759	44.703	47.967	47.967	1.100	760
770	27.30	35.207	27.30	26.774	44.707	48.030	48.030	1.100	770
780	27.43	35.213	27.43	26.789	44.711	48.093	48.093	1.100	780
790	27.56	35.219	27.56	26.804	44.715	48.156	48.156	1.100	790
800	27.69	35.225	27.69	26.819	44.719	48.219	48.219	1.100	800
810	27.82	35.231	27.82	26.834	44.723	48.282	48.282	1.100	810
820	27.95	35.237	27.95	26.849	44.727	48.345	48.345	1.100	820
830	28.08	35.243	28.08	26.864	44.731	48.408	48.408	1.100	830
840	28.21	35.249	28.21	26.879	44.735	48.471	48.471	1.100	840
850	28.34	35.255	28.34	26.894	44.739	48.534	48.534	1.100	850
860	28.47	35.261	28.47	26.909	44.743	48.597	48.597	1.100	860
870	28.60	35.267	28.60	26.924	44.747	48.660	48.660	1.100	870
880	28.73	35.273	28.73	26.939	44.751	48.723	48.723	1.100	880
890	28.86	35.279	28.86	26.954	44.755	48.786	48.786	1.100	890
900	28.99	35.285	28.99	26.969	44.759	48.849	48.849	1.100	900
910	29.12	35.291	29.12	26.984	44.763	48.912	48.912	1.100	910
920	29.25	35.297	29.25	26.999	44.767	48.975	48.975	1.100	920
930	29.38	35.303	29.38	27.014	44.771	49.038	49.038	1.100	930
940	29.51	35.309	29.51	27.029	44.775	49.101	49.101	1.100	940
950	29.64	35.315	29.64	27.044	44.779	49.164	49.164	1.100	950
960	29.77	35.321	29.77	27.059	44.783	49.227	49.227	1.100	960
970	29.90	35.327	29.90	27.074	44.787	49.290	49.290	1.100	970
980	30.03	35.333	30.03	27.089	44.791	49.353	49.353	1.100	980
990	30.16	35.339	30.16	27.104	44.795	49.416	49.416	1.100	990
1000	30.29	35.345	30.29	27.119	44.799	49.479	49.479	1.100	1000

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIGMA T	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA T	SIGMA T	SIGMA T	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TURBIN	DEG C				DB
2	17.29	34.745	7.23	105.5	21.2	1.21	12.5	0.12	1.129	17.29	25.619	44.399	43.179	2
10	17.42	34.751	7.22	102.9	21.1	1.23	13.3	0.10	1.142	17.42	25.634	44.403	43.242	10
20	17.55	34.757	5.48	79.4	19.1	1.72	22.3	0.17	1.146	17.55	25.649	44.407	43.305	20
30	17.68	34.763	4.24	58.8	17.4	2.11	29.8	0.01	1.149	17.68	25.664	44.411	43.368	30
40	17.81	34.769	3.21	44.1	15.7	2.42	34.3	0.01	1.150	17.81	25.679	44.415	43.431	40
50	17.94	34.775	2.58	36.1	14.1	2.57	36.5	0.01	1.151	17.94	25.694	44.419	43.494	50
60	18.07	34.781	1.97	26.9	12.5	2.77	39.5	0.02</						

# MARATHON 2 STA. 75



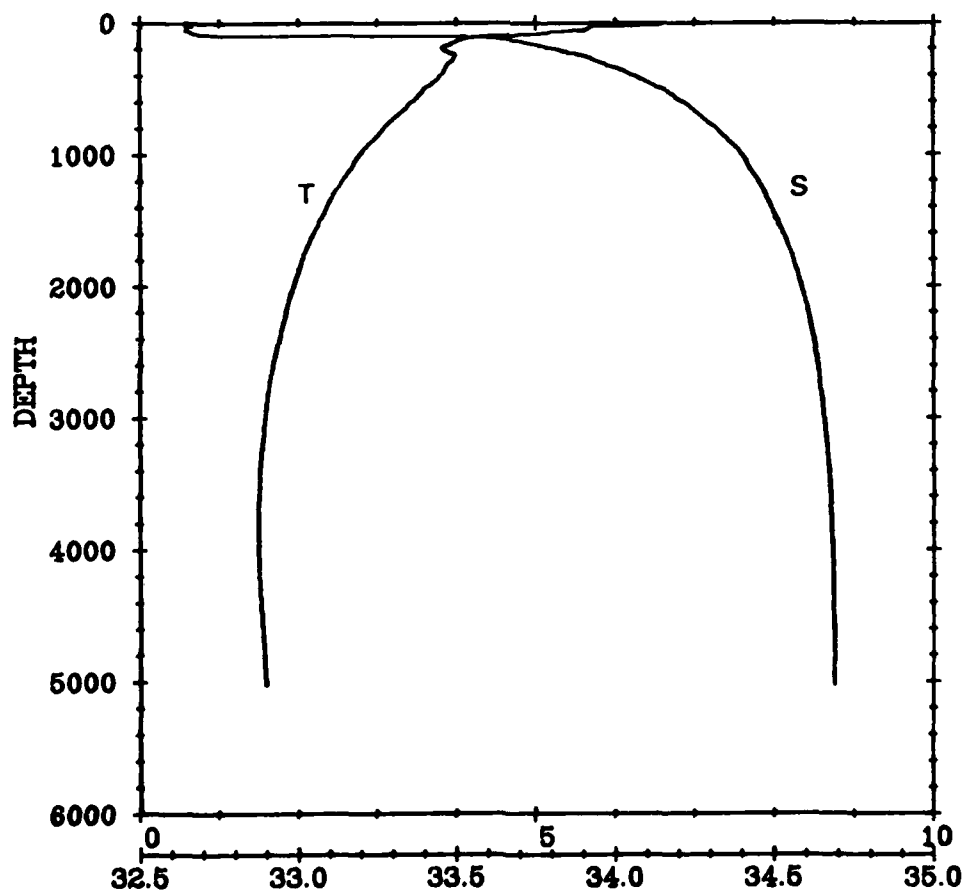
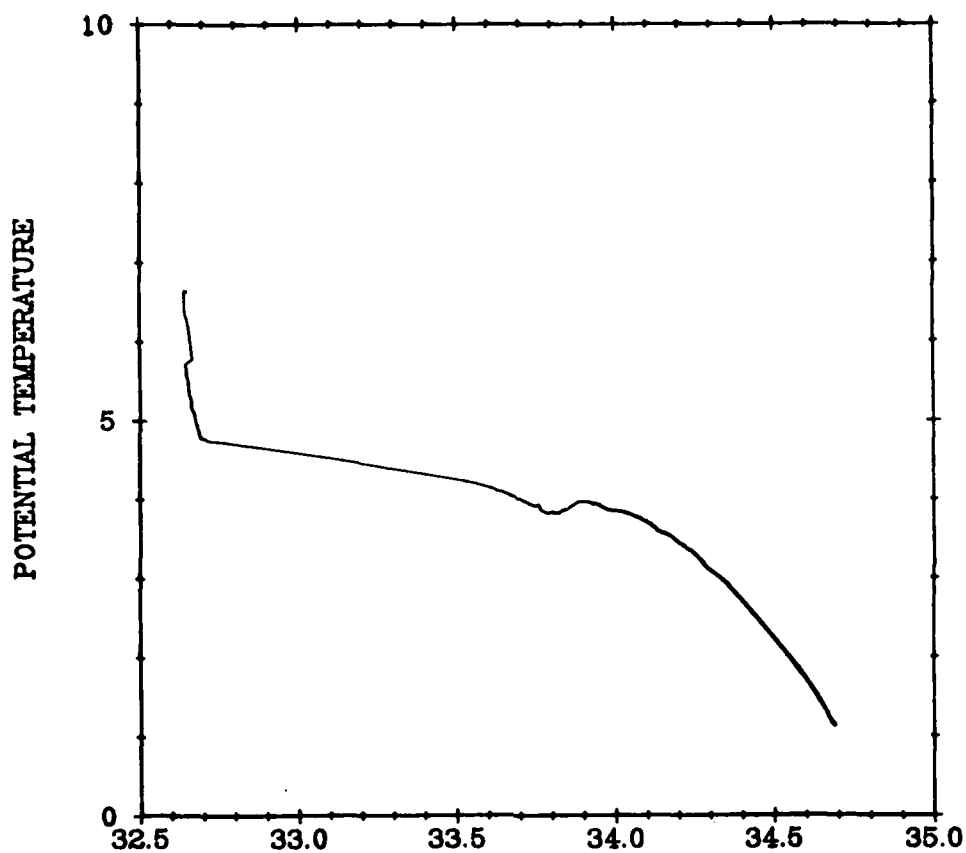
LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTLE	WIND	SPEED	AIR TEMP	WAT TEMP	WAT DEPT	WAT SURF
49 09 N	121 59 W	5	29	94	100	4-95	200	10	5	5	10	10

## CTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA T	SIGMA T	SIGMA T	WAT DEPT	WAT SURF	WAT DEPT	WAT SURF
DB	DEG C		DEG C								
1	5.458	32.644	5.458	25.624	34.622	43.224	25.624	1	5.458	32.644	5.458
20	5.321	32.646	5.299	25.656	34.659	43.292	25.656	1	5.321	32.646	5.321
40	5.179	32.646	5.155	25.702	34.705	43.409	25.702	1	5.179	32.646	5.179
60	5.032	32.652	5.011	25.740	34.743	43.464	25.740	1	5.032	32.652	5.032
80	5.009	32.652	5.003	25.922	34.935	43.565	25.922	1	5.009	32.652	5.009
100	4.590	33.009	4.583	25.844	35.234	43.722	25.844	1	4.590	33.009	4.590
120	3.983	33.014	3.973	25.766	35.279	44.026	25.766	1	3.983	33.014	3.983
140	3.849	33.020	3.836	25.854	35.372	44.124	25.849	1	3.849	33.020	3.849
160	3.952	33.024	3.945	26.909	36.009	44.123	25.952	1	3.952	33.024	3.952
180	3.943	33.030	3.920	26.959	36.070	44.706	25.947	1	3.943	33.030	3.943
200	3.873	34.008	3.849	27.002	36.027	44.315	25.990	1	3.873	34.008	3.873
220	3.821	34.055	3.792	27.055	36.072	44.393	25.996	1	3.821	34.055	3.821
240	3.707	34.099	3.706	27.099	36.209	44.904	25.992	1	3.707	34.099	3.707
260	3.606	34.141	3.602	27.145	36.270	44.900	25.990	1	3.606	34.141	3.606
280	3.455	34.206	3.424	27.202	36.345	45.072	25.954	1	3.455	34.206	3.455
300	3.283	34.264	3.236	27.276	36.409	45.143	25.958	1	3.283	34.264	3.283
320	3.000	34.306	2.947	27.334	36.485	45.229	25.974	1	3.000	34.306	3.000
340	2.952	34.358	2.922	27.382	36.542	45.292	25.974	1	2.952	34.358	2.952
360	2.793	34.396	2.727	27.427	36.595	45.303	25.949	1	2.793	34.396	2.793
380	2.685	34.421	2.612	27.457	36.600	45.354	25.950	1	2.685	34.421	2.685
400	2.565	34.448	2.486	27.490	36.569	45.409	25.964	1	2.565	34.448	2.565
420	2.406	34.472	2.370	27.509	36.704	45.409	25.947	1	2.406	34.472	2.406
440	2.302	34.490	2.279	27.541	36.701	45.500	25.942	1	2.302	34.490	2.302
460	2.202	34.507	2.192	27.561	36.756	45.540	25.950	1	2.202	34.507	2.202
480	2.206	34.526	2.100	27.584	36.783	45.572	25.950	1	2.206	34.526	2.206
500	2.120	34.545	2.070	27.607	36.811	45.574	25.950	1	2.120	34.545	2.120
520	2.034	34.559	1.993	27.623	36.832	45.627	25.970	1	2.034	34.559	2.034
540	1.949	34.571	1.870	27.638	36.849	45.649	25.970	1	1.949	34.571	1.949
560	1.841	34.582	1.776	27.652	36.855	45.659	25.970	1	1.841	34.582	1.841
580	1.737	34.593	1.744	27.665	36.893	45.693	25.970	1	1.737	34.593	1.737
600	1.634	34.603	1.688	27.678	36.898	45.707	25.944	1	1.634	34.603	1.634
620	1.531	34.611	1.642	27.692	36.902	45.722	25.954	1	1.531	34.611	1.531
640	1.427	34.619	1.593	27.648	36.920	45.707	25.970	1	1.427	34.619	1.427
660	1.323	34.625	1.544	27.670	36.905	45.780	25.972	1	1.323	34.625	1.323
680	1.222	34.631	1.499	27.626	36.947	45.766	25.941	1	1.222	34.631	1.222
700	1.120	34.637	1.450	27.723	36.955	45.766	25.949	1	1.120	34.637	1.120
720	1.026	34.644	1.425	27.703	36.965	45.766	25.949	1	1.026	34.644	1.026
740	0.923	34.649	1.391	27.706	36.970	45.767	25.970	1	0.923	34.649	0.923
760	0.820	34.653	1.360	27.742	36.985	45.767	25.945	1	0.820	34.653	0.820
780	0.716	34.657	1.334	27.747	36.987	45.803	25.945	1	0.716	34.657	0.716
800	0.616	34.662	1.309	27.747	36.982	45.805	25.945	1	0.616	34.662	0.616
820	0.512	34.668	1.289	27.769	36.999	45.828	25.968	1	0.512	34.668	0.512
840	0.407	34.670	1.264	27.761	37.005	45.806	25.942	1	0.407	34.670	0.407
860	0.303	34.670	1.235	27.764	37.009	45.800	25.949	1	0.303	34.670	0.303
880	0.199	34.673	1.215	27.768	37.014	45.846	25.952	1	0.199	34.673	0.199
900	0.095	34.675	1.202	27.770	37.017	45.880	25.970	1	0.095	34.675	0.095
920	-0.009	34.677	1.199	27.770	37.020	45.854	25.946	1	-0.009	34.677	-0.009
940	-0.095	34.679	1.179	27.766	37.021	45.857	25.970	1	-0.095	34.679	-0.095
960	-0.189	34.680	1.169	27.777	37.025	45.805	25.928	1	-0.189	34.680	-0.189
980	-0.282	34.681	1.162	27.778	37.027	45.862	25.981	1	-0.282	34.681	-0.282
1000	-0.379	34.681	1.157	27.779	37.028	45.863	25.906	1	-0.379	34.681	-0.379
1020	-0.476	34.683	1.154	27.780	37.030	45.865	25.904	1	-0.476	34.683	-0.476
1040	-0.573	34.683	1.149	27.781	37.030	45.866	25.957	1	-0.573	34.683	-0.573
1060	-0.672	34.684	1.146	27.781	37.031	45.867	25.904	1	-0.672	34.684	-0.672
1080	-0.771	34.684	1.143	27.782	37.032	45.868	25.974	1	-0.771	34.684	-0.771
1100	-0.871	34.685	1.141	27.783	37.033	45.869	25.961	1	-0.871	34.685	-0.871
1120	-0.971	34.686	1.139	27.783	37.033	45.869	25.991	1	-0.971	34.686	-0.971
1140	-1.072	34.686	1.138	27.784	37.034	45.870	25.970	1	-1.072	34.686	-1.072
1160	-1.174	34.686	1.137	27.784	37.034	45.870	25.946	1	-1.174	34.686	-1.174
1180	-1.276	34.686	1.137	27.784	37.034	45.871	25.900	1	-1.276	34.686	-1.276
1200	-1.379	34.686	1.136	27.784	37.034	45.871	25.950	1	-1.379	34.686	-1.379



# MARATHON 2 STA. 76



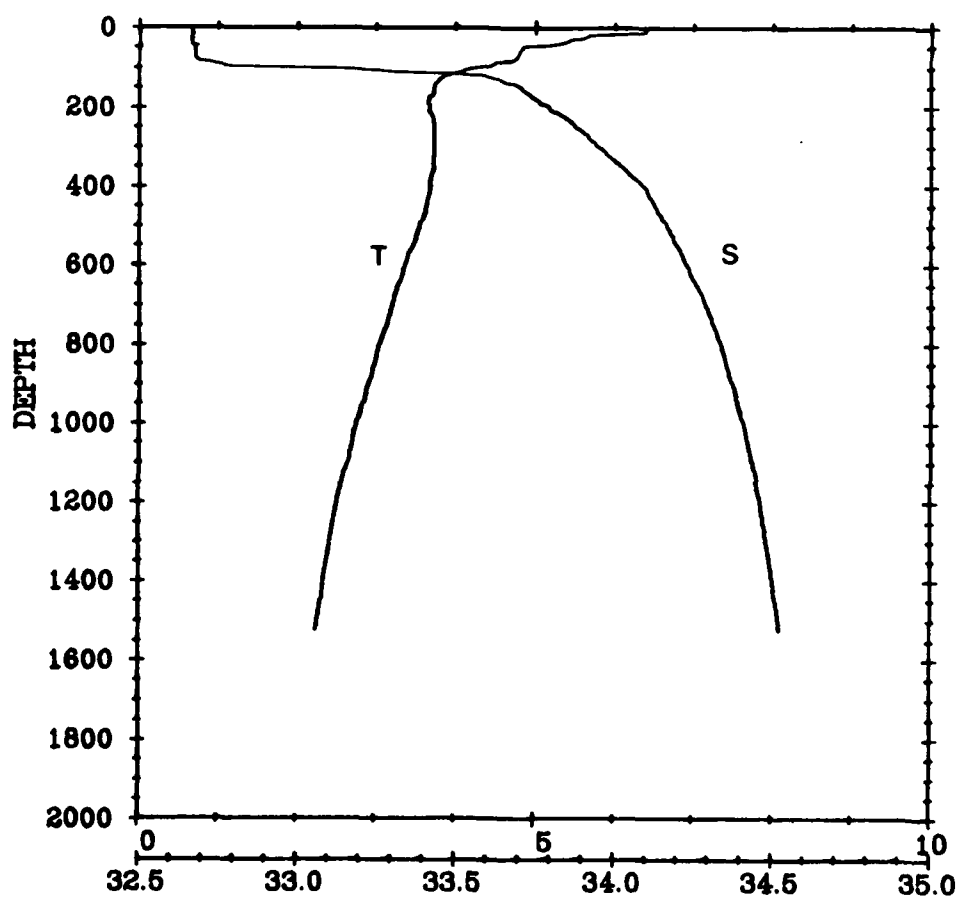
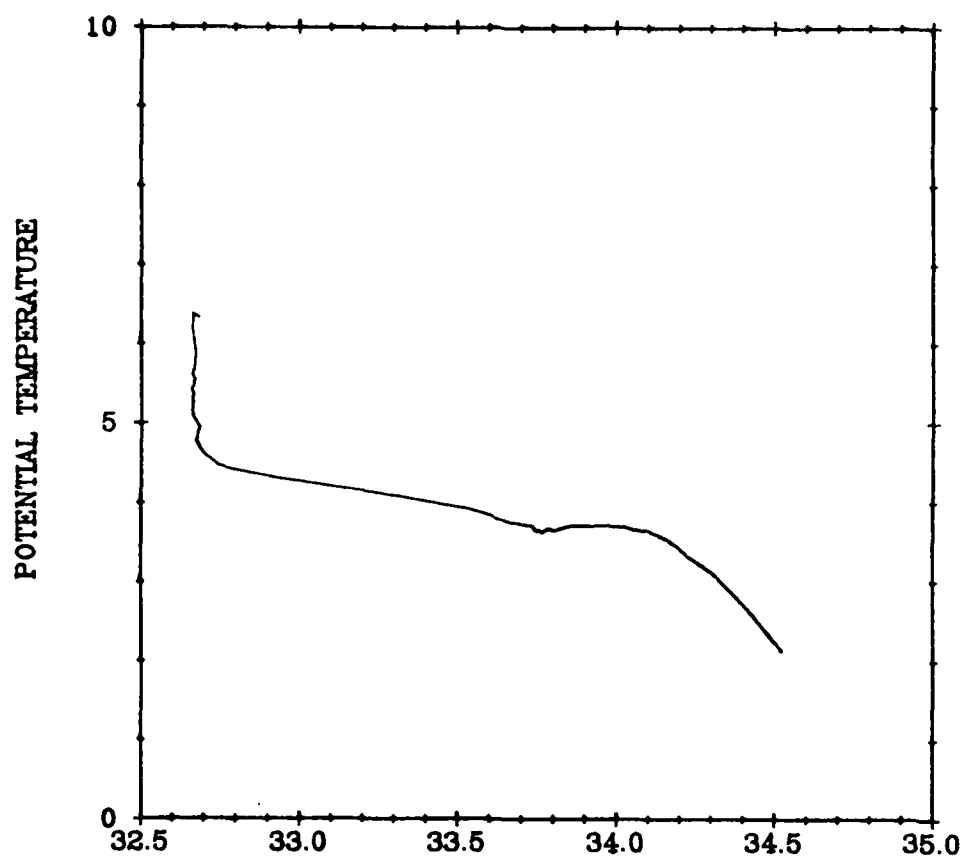
K V THOMAS WASHINGTON MARATHON LEG 11 STATE: N

LATITUDE LONGITUDE DAY YR START TIME BOTTOM WIND SPEED AIR TEMP WPT B/LM MAX M  
44 47 3N 112 1 1W 5 29 84 1124 4347 40 5 12.0 12.0 12.0 12.0 12.0

STD DATA  
PRESS DB TEMP DEG C SALINITY POT TEMP DEG C SIGMA T SIGMA 2 SIGMA 4 SIGMA 6 DYNAMIC HT DEPTH M  
1 5.344 32.571 35.154 2.1469 34.577 43.281 271.281 0.00 0.00  
20 5.371 32.597 35.169 2.1469 34.599 43.342 271.342 0.00 0.00  
40 5.256 32.564 35.280 2.1469 34.543 43.342 271.342 0.00 0.00  
60 4.852 32.575 35.439 2.1469 34.441 43.607 271.444 0.00 0.00  
80 4.691 32.574 35.435 2.1469 34.434 43.692 271.529 0.00 0.00  
100 4.312 32.568 35.470 2.1469 34.449 43.949 271.702 0.00 0.00  
120 3.735 33.447 35.425 2.1469 34.373 44.622 272.101 0.00 0.00  
140 3.649 33.738 35.555 2.1469 34.394 44.706 272.979 0.00 0.00  
160 3.731 33.917 35.714 2.1469 34.345 44.732 274.277 0.00 0.00  
180 3.734 33.945 35.714 2.1469 34.345 44.914 274.379 0.00 0.00  
200 3.719 34.117 35.695 2.1469 34.345 44.873 274.409 0.00 0.00  
220 3.675 34.126 35.648 2.1469 34.345 44.911 274.409 0.00 0.00  
240 3.627 34.125 35.596 2.1469 34.345 44.911 274.409 0.00 0.00  
260 3.584 34.124 35.540 2.1469 34.345 44.911 274.409 0.00 0.00  
280 3.545 34.227 35.485 2.1469 34.345 44.911 274.409 0.00 0.00  
300 3.507 34.333 35.430 2.1469 34.345 44.911 274.409 0.00 0.00  
320 3.471 34.333 35.375 2.1469 34.345 44.911 274.409 0.00 0.00  
340 2.911 34.369 35.320 2.1469 34.345 44.911 274.409 0.00 0.00  
360 2.765 34.433 35.265 2.1469 34.345 44.911 274.409 0.00 0.00  
380 2.650 34.431 35.210 2.1469 34.345 44.911 274.409 0.00 0.00  
400 2.520 34.439 35.155 2.1469 34.345 44.911 274.409 0.00 0.00  
420 2.426 34.479 35.100 2.1469 34.345 44.911 274.409 0.00 0.00  
440 2.343 34.497 35.045 2.1469 34.345 44.911 274.409 0.00 0.00  
460 2.267 34.515 34.990 2.1469 34.345 44.911 274.409 0.00 0.00  
480 2.211 34.523 34.935 2.1469 34.345 44.911 274.409 0.00 0.00

WISKIN BOTTLE DATA  
DEPTH M TEMP DEG C SALINITY DIS O2 O2 SAT SIGD3 PO4 NO3 NO2 TRIT TURBID POT TEMP DEG C SIGMA T SIGMA 2 SIGMA 4 PRESS DB  
2 5.355 32.570 35.154 115.2 24.7 1.05 24.0 0.15 4.65 5.355 26.667 34.576 43.286 271.281 0.00  
20 5.528 32.599 35.169 105.1 24.9 1.06 24.2 0.15 4.65 5.528 26.667 34.599 43.342 271.342 0.00  
40 4.799 32.562 35.280 111.2 25.0 1.03 24.5 0.15 4.65 4.799 26.667 34.543 43.342 271.342 0.00  
60 4.259 33.298 35.439 5.27 11.9 46.9 2.13 26.9 0.05 3.44 4.259 26.667 34.441 43.607 271.444 0.00  
80 3.697 33.720 35.435 3.01 40.8 71.4 2.00 36.4 0.01 3.19 3.697 26.667 34.434 43.692 271.529 0.00  
100 3.654 33.917 35.470 2.04 27.4 94.4 2.01 40.2 0.01 3.03 3.654 26.667 34.449 43.949 271.702 0.00  
120 3.725 33.912 35.425 1.50 20.4 93.2 2.03 42.0 0.01 2.76 3.725 26.667 34.373 44.622 272.101 0.00  
140 3.731 33.945 35.555 1.19 16.2 99.3 2.09 42.9 0.01 2.19 3.731 26.667 34.394 44.706 272.979 0.00  
160 3.669 34.125 35.695 0.87 11.9 103.0 3.13 43.4 0.01 1.19 3.669 26.667 34.345 44.732 274.277 0.00  
180 3.639 34.121 35.714 0.77 10.4 121.5 3.15 43.6 0.01 1.44 3.639 26.667 34.345 44.914 274.379 0.00  
200 3.655 34.231 35.714 0.55 8.9 101.6 3.15 43.8 0.01 1.38 3.655 26.667 34.345 44.873 274.409 0.00  
220 3.67 34.290 35.648 0.59 9.3 107.2 3.17 44.0 0.01 1.27 3.67 26.667 34.345 44.911 274.409 0.00  
240 3.637 34.315 35.596 0.61 8.2 142.8 3.19 44.1 0.01 1.28 3.637 26.667 34.345 44.911 274.409 0.00  
260 2.895 34.313 35.540 0.55 7.3 149.7 3.11 44.5 0.01 1.20 2.895 26.667 34.345 44.911 274.409 0.00  
280 2.703 34.419 35.485 0.48 6.4 157.7 3.13 44.9 0.01 1.25 2.703 26.667 34.345 44.911 274.409 0.00  
300 2.452 34.473 35.430 0.51 6.7 165.7 3.13 45.0 0.01 2.349 2.452 26.667 34.345 44.911 274.409 0.00  
320 2.229 34.523 34.935 0.74 9.7 172.7 3.13 44.5 0.01 2.147 2.229 26.667 34.345 44.911 274.409 0.00

# MARATHON 2 STA. 77

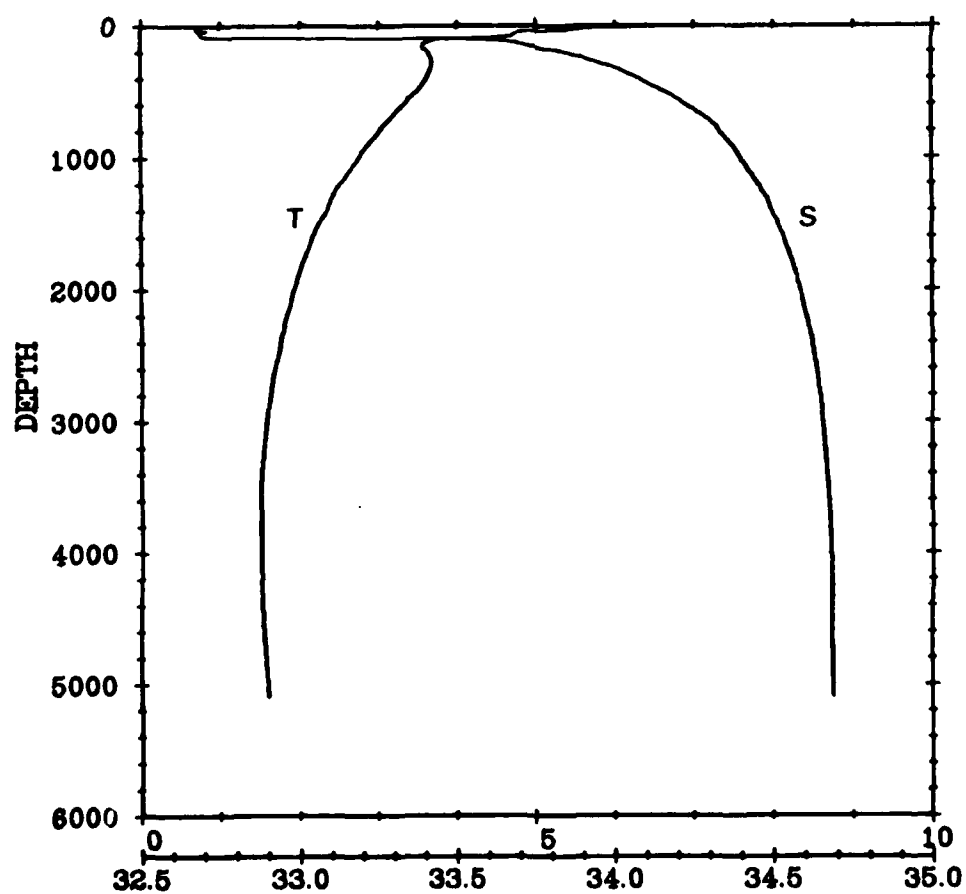
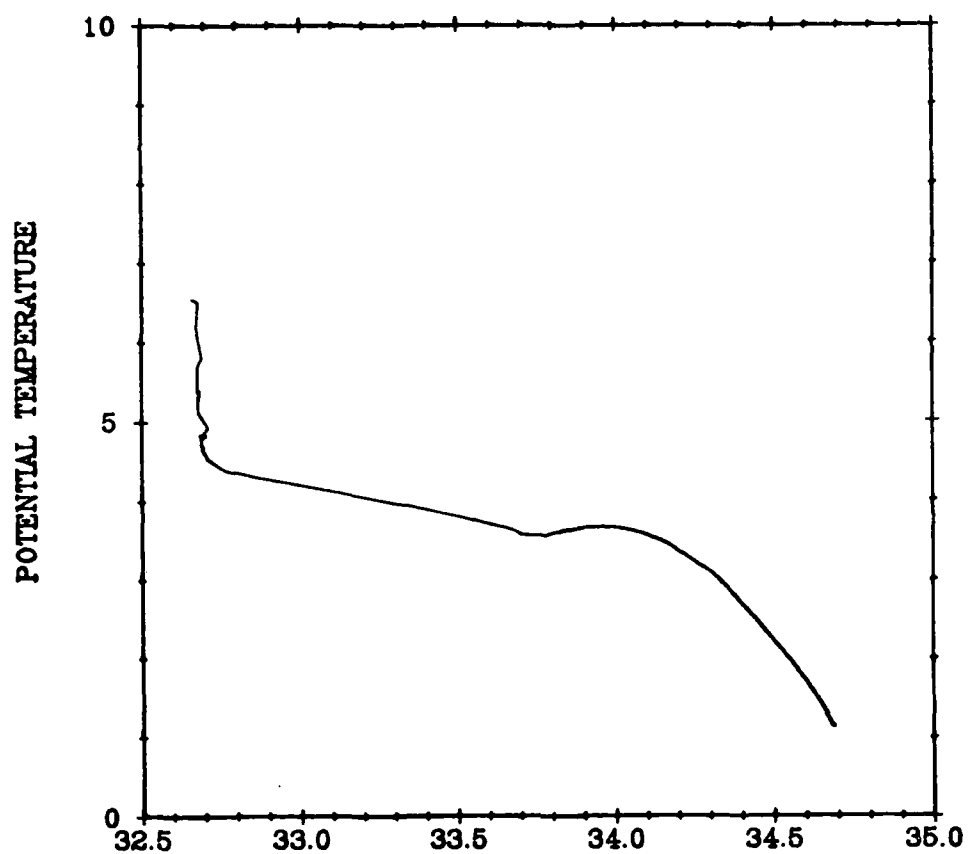


LATITUDE	LONGITUDE	MO	DAY	YEAR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	NET BULB	HAXIM
10 10 LN	151 19 LW	5	29	94	2124	5110	120	KT	DEG C	DEG C	MM

STD DATA											
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 1	SIGMA 2	SIGMA 3	SIGMA 4	SIGMA 5	DYNAMIC HT	DEPTH
DB	DEG C		DEG C								M
1	5.454	32.674	5.404	25.678	34.663	43.264	232.144	1.000			1
20	5.705	32.674	5.703	25.755	34.796	43.437	223.200	1.046			20
40	5.933	32.688	5.930	25.819	34.914	43.586	215.128	1.089			40
60	6.145	32.691	6.141	25.873	34.963	43.648	208.250	1.132			60
80	6.341	32.705	6.337	25.916	34.990	43.681	202.105	1.174			80
100	6.524	33.139	6.520	26.340	35.487	44.167	159.201	1.212			100
120	6.699	33.124	6.695	26.915	35.949	44.675	123.470	1.248			120
140	6.835	33.318	6.822	26.920	36.128	44.751	105.897	1.285			140
160	6.982	33.910	6.965	26.973	36.378	44.797	101.112	1.322			160
180	7.190	33.973	7.177	27.022	36.527	44.844	107.216	1.356			180
200	7.366	34.129	7.342	27.070	36.774	44.893	102.971	1.389			200
220	7.624	34.276	7.597	27.042	36.218	44.938	99.998	1.420			220
240	7.874	34.113	7.844	27.105	36.251	44.977	96.489	1.450			240
260	8.109	34.155	8.075	27.165	36.299	45.022	91.446	1.476			260
280	8.344	34.225	8.304	27.238	36.378	45.070	86.923	1.506			280
300	8.581	34.289	8.534	27.305	36.453	45.122	81.185	1.531			300
320	8.832	34.333	8.779	27.355	36.510	45.166	76.949	1.559			320
340	9.092	34.369	9.033	27.346	36.559	45.212	71.114	1.584			340
360	9.267	34.397	9.201	27.411	36.599	45.259	65.497	1.606			360
380	9.459	34.423	9.387	27.442	36.635	45.301	61.773	1.625			380
400	9.636	34.451	9.557	27.495	36.676	45.347	58.104	1.641			400
420	9.829	34.477	9.734	27.525	36.713	45.390	54.413	1.657			420
440	10.047	34.493	9.944	27.544	36.736	45.417	50.425	1.671			440
460	10.257	34.514	10.138	27.570	36.766	45.452	46.819	1.684			460
480	10.477	34.532	10.357	27.591	36.792	45.482	43.257	1.695			480
500	10.697	34.546	10.575	27.608	36.813	45.505	39.728	1.704			500
520	10.919	34.560	10.792	27.626	36.834	45.531	34.289	1.716			520
540	11.141	34.573	11.008	27.642	36.853	45.551	33.292	1.726			540
560	11.363	34.584	11.224	27.654	36.868	45.567	32.107	1.735			560
580	11.585	34.594	11.449	27.665	36.883	45.588	31.258	1.744			580
600	11.807	34.602	11.677	27.676	36.897	45.603	30.429	1.753			600
620	12.029	34.612	11.899	27.689	36.912	45.621	29.434	1.761			620
640	12.251	34.620	12.121	27.699	36.925	45.639	28.492	1.769			640
660	12.473	34.626	12.343	27.706	36.934	45.650	28.196	1.776			660
680	12.695	34.632	12.565	27.714	36.945	45.662	27.421	1.783			680
700	12.917	34.639	12.787	27.723	36.956	45.675	26.772	1.789			700
720	13.139	34.644	13.009	27.729	36.954	45.686	26.198	1.794			720
740	13.361	34.648	13.231	27.735	36.972	45.695	25.255	1.799			740
760	13.583	34.653	13.453	27.741	36.979	45.704	24.105	1.804			760
780	13.805	34.657	13.675	27.747	36.986	45.712	23.056	1.809			780
800	14.027	34.660	13.897	27.751	36.992	45.719	22.102	1.814			800
820	14.249	34.663	14.119	27.755	36.997	45.725	21.355	1.819			820
840	14.471	34.667	14.341	27.760	37.004	45.734	20.401	1.824			840
860	14.693	34.670	14.563	27.764	37.009	45.739	19.414	1.829			860
880	14.915	34.672	14.785	27.767	37.012	45.744	18.417	1.834			880
900	15.137	34.674	15.007	27.769	37.015	45.748	17.400	1.839			900
920	15.359	34.675	15.229	27.771	37.018	45.751	16.357	1.844			920
940	15.581	34.677	15.451	27.773	37.021	45.754	15.420	1.849			940
960	15.803	34.679	15.673	27.775	37.023	45.757	14.412	1.854			960
980	16.025	34.680	15.895	27.777	37.025	45.760	13.409	1.859			980
1000	16.247	34.681	16.117	27.778	37.027	45.762	12.333	1.864			1000
1020	16.469	34.681	16.339	27.779	37.027	45.763	11.406	1.869			1020
1040	16.691	34.682	16.561	27.780	37.029	45.765	10.424	1.874			1040
1060	16.913	34.682	16.783	27.780	37.029	45.765	9.402	1.879			1060
1080	17.135	34.683	17.005	27.781	37.031	45.766	8.424	1.884			1080
1100	17.357	34.684	17.227	27.782	37.032	45.768	7.465	1.889			1100
1120	17.579	34.684	17.449	27.782	37.032	45.768	6.496	1.894			1120
1140	17.801	34.685	17.671	27.783	37.033	45.769	5.593	1.899			1140
1160	18.023	34.685	17.893	27.783	37.033	45.769	4.745	1.904			1160
1180	18.245	34.685	18.115	27.784	37.034	45.770	3.944	1.909			1180
1200	18.467	34.685	18.337	27.784	37.034	45.770	3.194	1.914			1200

WISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIG 0	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	5.454	32.683	7.14	106.9	26.4	1.35	14.3	2.19	5.997	25.596	34.595	43.157		1
10	5.439	32.692	7.11	105.5	26.8	1.37	14.6	0.15	5.416	25.599	34.943	43.496		10
20	5.456	32.695	7.14	101.4	27.0	1.44	15.6	0.13	4.752	25.875	34.964	43.649		20
30	5.433	33.214	5.78	99.2	49.4	2.27	27.3	0.09	4.026	26.379	35.486	44.278		30
40	5.611	33.677	3.11	42.0	71.7	2.58	35.7	0.02	3.601	26.703	35.906	44.611		40
50	5.889	33.791	2.26	29.2	91.3	2.82	40.1	0.01	3.574	26.860	35.992	44.718		50
60	6.091	33.956	1.22	10.8	101.0	3.00	41.4	0.01	3.671	26.999	36.123	44.912		60
70	6.313	34.070	0.75	10.2	113.8	3.07	43.9	0.01	3.676	27.086	36.211	44.991		70
80	6.513	34.156	0.67	9.1	124.2	3.06	43.8	0.01	3.492	27.167	36.297	45.122		80
90	6.704	34.217	0.43	8.5	134.7	3.06	43.8	0.00	3.264	27.252	36.393	45.107		90
100	6.889	34.284	0.36	9.9	139.7	3.06	43.8	0.00	3.144	27.300	36.447	45.135		100
110	7.107	34.343	0.58	7.7	147.6	3.07	44.1	0.00	2.953	27.355	36.521	45.269		110
120	7.369	34.379	0.56	7.7	154.3	3.11	44.4	0.00	2.809	27.426	36.569	45.123		120
130	7.531	34.428	0.50	6.6	159.8	3.12	44.6	0.00	2.566	27.442	36.613	45.174		130
140	7.752	34.472	0.51	6.7	171.0	3.12	44.9	0.00	2.369	27.519	36.704	45.179		140
150	7.974	34.523	0.72	9.4	178.4	3.08	44.5	0.00	2.127	27.579	36.777	45.564		150
160	8.207	34.559	0.93	12.1	182.0	3.04	44.1	0.00	1.952	27.621	36.829	45.623		160
170	8.446	34.585	1.19	15.5	186.6	3.00	43.5	0.00	1.811	27.654	36.868	45.670		170
180	8.687	34.628	1.99	24.4	195.5	2.88	41.5	0.00	1.550	27.709	36.936	45.751		180
190	8.930	34.655	2.51	32.3	191.1	2.75	39.8	0.00	1.369	27.743	36.980	45.805		190
200	9.173	34.673	2.98	38.2	175.5	2.65	38.4	0.00	1.237	27.766	37.011	45.842		200
210	9.417	34.681	3.20	40.9	174.6		37.8	0.00	1.175	27.777	37.025	45.859		210
220	9.661	34.685	3.10	42.2	178.2		37.9	0.00	1.146	27.792	37.032	45.868		220
230	9.904	34.688	3.15	42.9	192.3	2.57	37.6	0.00	1.139	27.795	37.035	45.872		230

# MARATHON 2 STA. 78



R V THOMAS WASHINGTON MARATHON LEI 11 STATION 19

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAR M
50 42 4N	152 17 W	5 22-84	0429	4493	210	11	83	78	1014

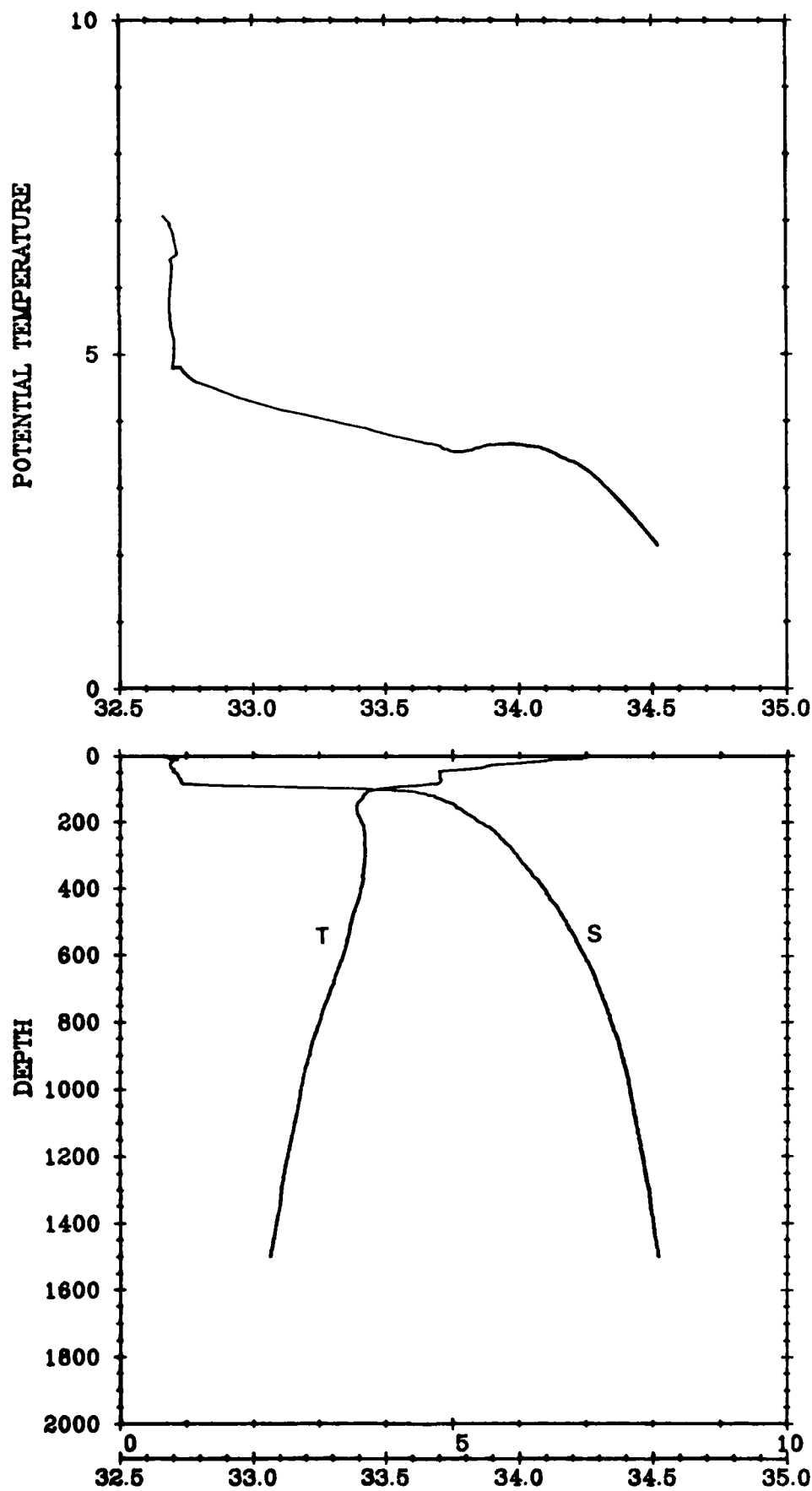
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				10 TON		M
0	4.903	32.686	6.921	25.607	14.784	41.074	11.752	0.00	0
20	4.083	32.695	6.081	25.722	14.744	41.167	11.658	1.046	10
40	5.189	32.693	5.185	25.811	14.837	41.262	11.564	2.091	19
60	4.819	32.718	4.905	25.898	14.974	41.376	11.453	3.137	29
80	4.134	32.752	4.728	25.911	15.120	41.508	11.318	4.183	39
100	3.991	33.027	3.984	26.407	15.575	44.228	10.791	5.221	49
120	3.559	33.756	3.549	26.841	15.775	44.712	10.494	6.260	59
140	3.427	33.852	3.614	26.911	16.141	44.763	11.466	7.300	69
160	3.679	33.912	3.662	26.970	16.196	44.814	12.429	8.346	79
180	3.681	33.944	3.661	27.116	16.140	44.858	12.445	9.391	89
200	3.654	34.040	3.635	27.160	16.185	44.914	12.424	10.437	99
220	3.620	34.091	3.593	27.104	16.230	44.950	12.333	11.482	109
240	3.549	34.133	3.519	27.144	16.274	44.937	12.310	12.527	119
260	3.475	34.172	3.445	27.183	16.216	44.942	12.324	13.572	129
280	3.352	34.240	3.312	27.250	16.188	44.920	12.285	14.617	139
300	3.178	34.296	3.131	27.311	16.159	44.948	12.182	15.662	149
320	3.003	34.342	2.950	27.365	16.521	45.269	12.374	16.707	159
340	2.947	34.391	2.789	27.410	16.574	45.330	12.347	17.752	169
360	2.719	34.410	2.653	27.445	16.616	45.378	12.320	18.797	179
380	2.629	34.433	2.567	27.472	16.648	45.414	12.309	19.842	189
400	2.525	34.456	2.446	27.500	16.691	45.453	12.314	20.887	199
420	2.428	34.479	2.342	27.526	16.713	45.489	12.318	21.932	209
440	2.350	34.496	2.258	27.547	16.738	45.519	12.317	22.977	219
460	2.261	34.516	2.162	27.571	16.767	45.552	12.317	24.022	229
480	2.243	34.520	2.142	27.576	16.773	45.559	12.317	25.067	239

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIG3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
53	4.915	32.725	7.30	101.0	28.4	1.50	16.6	0.12	4.911	25.893	14.978	41.659	0.0	53
105	3.725	33.513	3.38	45.9	64.5	2.54	35.6	0.12	3.698	26.713	15.841	44.563	105	105
137	3.348	33.756	2.31	31.2	79.7	2.80	39.8	0.11	3.549	26.840	15.974	44.701	137	137
170	3.383	33.825	1.31	24.5	94.1	2.88	41.7	0.11	3.572	26.886	16.018	44.743	170	170
202	3.647	33.895	1.10	17.6	91.5	2.96	42.8	0.11	3.654	26.934	16.060	44.785	202	202
234	3.647	33.950	0.92	10.3	99.2	3.04	44.0	0.11	3.692	26.991	16.110	44.828	234	234
266	3.679	34.004	0.99	10.1	103.9	3.06	44.0	0.11	3.658	27.028	16.152	44.870	266	266
298	3.604	34.037	0.82	11.1	112.0	3.02	43.7	0.11	3.577	27.110	16.217	44.959	298	298
330	3.470	34.074	0.70	9.5	121.4	3.04	43.9	0.10	3.436	27.185	16.308	45.044	330	330
362	3.157	34.208	0.65	8.8	123.4	3.05	43.9	0.10	3.116	27.248	16.386	45.117	362	362
394	3.157	34.301	0.56	7.5	133.1	3.08	44.2	0.10	3.110	27.317	16.465	45.206	394	394
426	2.990	34.345	0.54	7.2	144.5	3.10	44.5	0.10	2.916	27.369	16.526	45.279	426	426
458	2.878	34.393	0.48	6.4	151.3	3.11	44.7	0.10	2.778	27.412	16.577	45.333	458	458
491	2.726	34.410	0.47	6.2	155.1	3.11	44.9	0.10	2.660	27.444	16.616	45.374	491	491
524	2.464	34.470	0.49	6.5	165.8		45.0	0.10	2.382	27.516	16.701	45.456	524	524
556	2.241	34.519	0.70	7.2	172.8		44.7	0.10	2.141	27.575	16.772	45.559	556	556

# MARATHON 2 STA. 79



LATITUDE 16 22 N LONGITUDE 122 05 W MO BY YR 5 29 94 START TIME 1702 BOTTOM 4781 WIND DIR 270 SPEED 10 AIR TEMP 20.9 WET BULB 19.1 BATHY 1024

## STD DATA

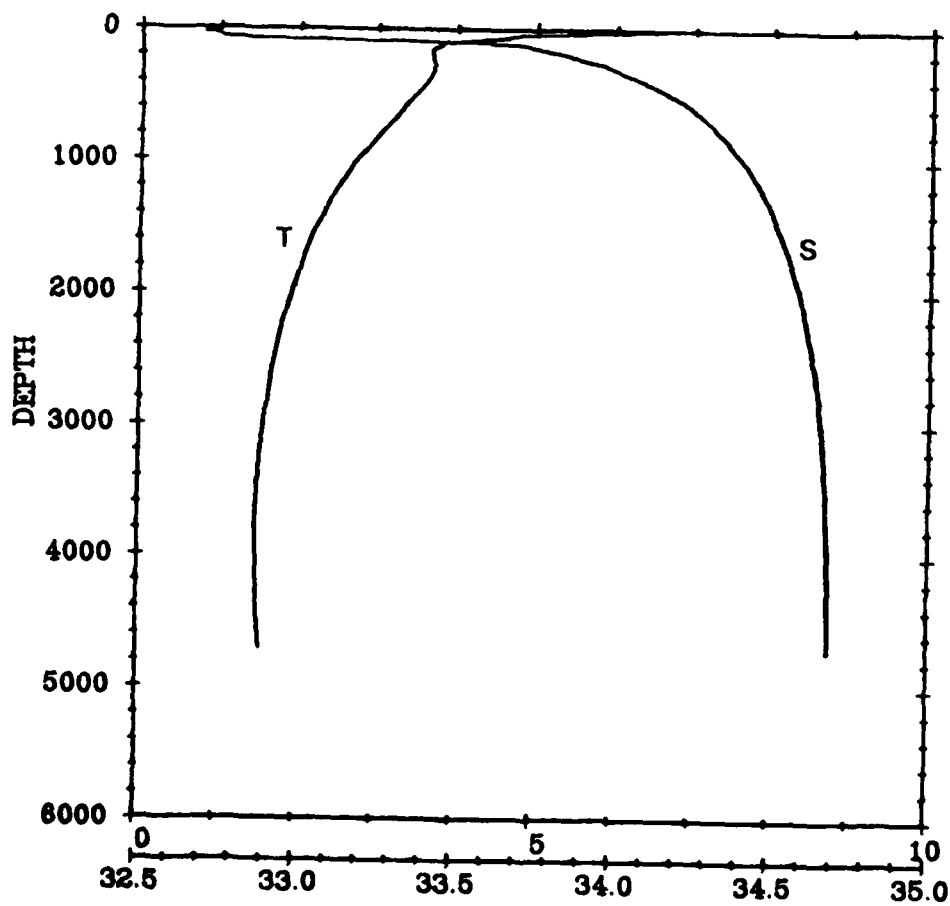
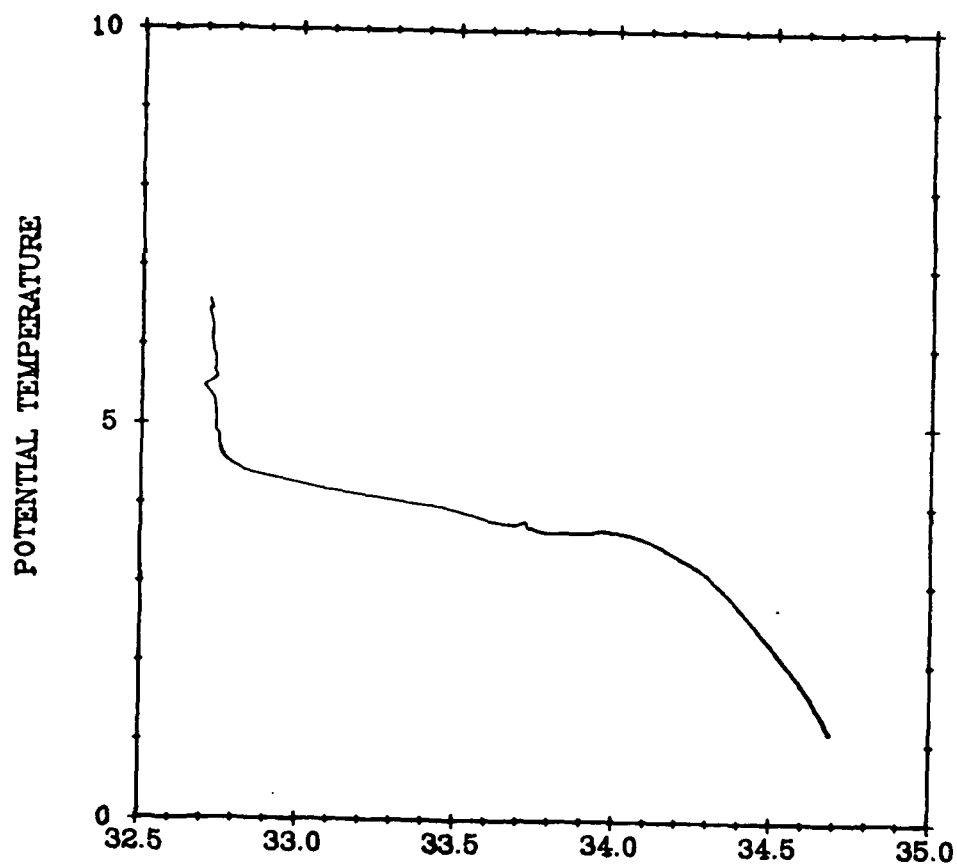
DEPTH	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
M	DB	DEG C		DEG C				CLATON		M
1	4.777	32.154	34.557	25.679	34.679	43.274	232.251	1.001		1
2	4.777	32.153	34.557	25.742	34.753	43.334	224.435	1.045		2
3	4.777	32.155	34.557	25.858	34.923	43.386	213.597	1.089		3
4	4.777	32.158	34.557	25.934	35.026	43.424	206.442	1.131		4
5	4.777	32.162	34.557	26.029	35.145	43.456	191.857	1.171		5
10	4.774	32.162	34.557	26.126	35.243	43.485	160.547	1.205		10
15	4.774	32.162	34.557	26.222	35.348	43.509	122.257	1.234		15
20	4.659	32.161	34.555	26.299	35.426	43.526	106.001	1.253		20
25	4.678	32.161	34.555	26.356	35.492	43.541	100.972	1.270		25
30	4.691	32.161	34.555	26.401	35.545	43.553	106.201	1.284		30
35	4.684	32.161	34.555	26.444	35.589	43.567	102.581	1.297		35
40	4.677	32.165	34.555	26.488	35.622	43.577	99.017	1.307		40
45	4.677	32.167	34.557	26.521	35.643	43.586	94.984	1.315		45
50	4.670	32.167	34.557	26.555	35.663	43.593	91.747	1.322		50
55	4.677	32.167	34.557	26.588	35.681	43.600	88.103	1.328		55
60	4.674	32.167	34.557	26.621	35.699	43.606	84.270	1.333		60
65	4.677	32.169	34.559	26.655	35.716	43.612	80.146	1.339		65
70	4.670	32.169	34.559	26.688	35.733	43.619	75.721	1.344		70
75	4.670	32.169	34.559	26.722	35.750	43.625	71.001	1.349		75
80	4.670	32.169	34.559	26.755	35.767	43.631	66.079	1.354		80
85	4.670	32.169	34.559	26.788	35.784	43.637	60.954	1.359		85
90	4.670	32.169	34.559	26.822	35.801	43.643	55.629	1.364		90
95	4.670	32.169	34.559	26.855	35.818	43.649	50.104	1.369		95
100	4.670	32.169	34.559	26.888	35.835	43.655	44.479	1.374		100
105	4.670	32.169	34.559	26.922	35.852	43.661	38.754	1.379		105
110	4.670	32.169	34.559	26.955	35.869	43.667	32.929	1.384		110
115	4.670	32.169	34.559	26.988	35.886	43.673	26.904	1.389		115
120	4.670	32.169	34.559	27.022	35.903	43.679	20.679	1.394		120
125	4.670	32.169	34.559	27.055	35.920	43.685	14.354	1.399		125
130	4.670	32.169	34.559	27.088	35.937	43.691	8.029	1.404		130
135	4.670	32.169	34.559	27.122	35.954	43.697	1.704	1.409		135
140	4.670	32.169	34.559	27.155	35.971	43.703		1.414		140
145	4.670	32.169	34.559	27.188	35.988	43.709		1.419		145
150	4.670	32.169	34.559	27.222	36.005	43.715		1.424		150
155	4.670	32.169	34.559	27.255	36.022	43.721		1.429		155
160	4.670	32.169	34.559	27.288	36.039	43.727		1.434		160
165	4.670	32.169	34.559	27.322	36.056	43.733		1.439		165
170	4.670	32.169	34.559	27.355	36.073	43.739		1.444		170
175	4.670	32.169	34.559	27.388	36.090	43.745		1.449		175
180	4.670	32.169	34.559	27.422	36.107	43.751		1.454		180
185	4.670	32.169	34.559	27.455	36.124	43.757		1.459		185
190	4.670	32.169	34.559	27.488	36.141	43.763		1.464		190
195	4.670	32.169	34.559	27.522	36.158	43.769		1.469		195
200	4.670	32.169	34.559	27.555	36.175	43.775		1.474		200
205	4.670	32.169	34.559	27.588	36.192	43.781		1.479		205
210	4.670	32.169	34.559	27.622	36.209	43.787		1.484		210
215	4.670	32.169	34.559	27.655	36.226	43.793		1.489		215
220	4.670	32.169	34.559	27.688	36.243	43.799		1.494		220
225	4.670	32.169	34.559	27.722	36.260	43.805		1.499		225
230	4.670	32.169	34.559	27.755	36.277	43.811		1.504		230
235	4.670	32.169	34.559	27.788	36.294	43.817		1.509		235
240	4.670	32.169	34.559	27.822	36.311	43.823		1.514		240
245	4.670	32.169	34.559	27.855	36.328	43.829		1.519		245
250	4.670	32.169	34.559	27.888	36.345	43.835		1.524		250
255	4.670	32.169	34.559	27.922	36.362	43.841		1.529		255
260	4.670	32.169	34.559	27.955	36.379	43.847		1.534		260
265	4.670	32.169	34.559	27.988	36.396	43.853		1.539		265
270	4.670	32.169	34.559	28.022	36.413	43.859		1.544		270
275	4.670	32.169	34.559	28.055	36.430	43.865		1.549		275
280	4.670	32.169	34.559	28.088	36.447	43.871		1.554		280
285	4.670	32.169	34.559	28.122	36.464	43.877		1.559		285
290	4.670	32.169	34.559	28.155	36.481	43.883		1.564		290
295	4.670	32.169	34.559	28.188	36.498	43.889		1.569		295
300	4.670	32.169	34.559	28.222	36.515	43.895		1.574		300
305	4.670	32.169	34.559	28.255	36.532	43.901		1.579		305
310	4.670	32.169	34.559	28.288	36.549	43.907		1.584		310
315	4.670	32.169	34.559	28.322	36.566	43.913		1.589		315
320	4.670	32.169	34.559	28.355	36.583	43.919		1.594		320
325	4.670	32.169	34.559	28.388	36.600	43.925		1.599		325
330	4.670	32.169	34.559	28.422	36.617	43.931		1.604		330
335	4.670	32.169	34.559	28.455	36.634	43.937		1.609		335
340	4.670	32.169	34.559	28.488	36.651	43.943		1.614		340
345	4.670	32.169	34.559	28.522	36.668	43.949		1.619		345
350	4.670	32.169	34.559	28.555	36.685	43.955		1.624		350
355	4.670	32.169	34.559	28.588	36.702	43.961		1.629		355
360	4.670	32.169	34.559	28.622	36.719	43.967		1.634		360
365	4.670	32.169	34.559	28.655	36.736	43.973		1.639		365
370	4.670	32.169	34.559	28.688	36.753	43.979		1.644		370
375	4.670	32.169	34.559	28.722	36.770	43.985		1.649		375
380	4.670	32.169	34.559	28.755	36.787	43.991		1.654		380
385	4.670	32.169	34.559	28.788	36.804	43.997		1.659		385
390	4.670	32.169	34.559	28.822	36.821	44.003		1.664		390
395	4.670	32.169	34.559	28.855	36.838	44.009		1.669		395
400	4.670	32.169	34.559	28.888	36.855	44.015		1.674		400
405	4.670	32.169	34.559	28.922	36.872	44.021		1.679		405
410	4.670	32.169	34.559	28.955	36.889	44.027		1.684		410
415	4.670	32.169	34.559	28.988	36.906	44.033		1.689		415
420	4.670	32.169	34.559	29.022	36.923	44.039		1.694		420
425	4.670	32.169	34.559	29.055	36.940	44.045		1.699		425
430	4.670	32.169	34.559	29.088	36.957	44.051		1.704		430
435	4.670	32.169	34.559	29.122	36.974	44.057		1.709		435
440	4.670	32.169	34.559	29.155	36.991	44.063		1.714		440
445	4.670	32.169	34.559	29.188	37.008	44.069		1.719		445
450	4.670	32.169	34.559	29.222	37.025	44.075		1.724		450
455	4.670	32.169	34.559	29.255	37.042	44.081		1.729		455
460	4.670	32.169	34.559	29.288	37.059	44.087		1.734		460
465	4.670	32.169	34.559	29.322	37.076	44.093		1.739		465
470	4.670	32.169	34.559	29.355	37.093	44.099		1.744		470
475	4.670	32.169	34.559	29.388	37.110	44.105		1.749		475
480	4.670	32.169	34.559	29.422	37.127	44.111		1.754		480
485	4.670	32.169	34.559	29.455	37.144	44.117		1.759		485
490	4.670	32.169	34.559	29.488	37.161	44.123		1.764		490
495	4.670	32.169	34.559	29.522	37.178	44.129		1.769		495
500	4.670	32.169	34.559	29.555	37.195	44.135		1.774		500

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	D.O. O2	O2 SAT	SIG03	P04	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	5.594	32.722	7.43	107.2	28.8	1.41		0.14		5.584	25.679	34.677	43.277	1
2	5.121	32.726	7.56	107.9	29.2	1.41		0.14		5.119	25.741	34.761	43.392	21
52	4.770	32.753	7.33	101.3	30.6	1.54		0.12		4.766	25.920	35.007	43.690	52
102	3.959	33.470	3.75	51.1	59.7	2.45		0.04		3.952	26.514	35.691	44.403	102
147	3.728	33.745	2.41	32.7	75.4	2.81		0.01		3.718	26.816	35.941	44.665	143
204	3.659	33.841	1.54	20.9	87.9	2.97		0.00		3.656	26.899	36.225	44.746	199
297	3.631	33.985	0.97	13.2	102.4	3.01		0.00		3.621	27.012	36.335	44.851	299
391	3.629	34.084	0.82	11.1	112.9	3.08		0.00		3.592	27.098	36.424	44.945	396
497	3.467	34.171	0.71	9.6	124.0	3.09		0.00		3.473	27.183	36.516	45.044	501
595	3.320	34.238	0.69	9.3	131.1	3.09		0.00		3.280	27.251	36.591	45.123	591
691	3.192	34.291	0.63	8.5	137.0	3.09		0.00		3.147	27.306	36.652	45.191	699
790	3.043	34.333	0.56	7.5	143.4	3.12		0.00		2.990	27.354	36.708	45.254	797
894	2.903	34.371	0.47	6.3	150.0	3.16		0.00		2.814	27.397	36.758	45.311	894
1008	2.776	34.416	0.43	5.7	159.5	3.16		0.00		2.639	27.451	36.823	45.385	1025
1139	2.453	34.472	0.52	6.9	166.6	3.14		0.00		2.277	27.519	36.904	45.479	1252
1501	2.210	34.522	0.77	10.1	173.2	3.11		0.00		2.130	27.578	36.976	45.563	1520
1729	2.075	34.557	0.99	12.8	176.1	3.06		0.00		1.958	27.620	36.926	45.622	1750
2028	1.926	34.593	1.32	17.1	181.2	3.00		0.00		1.767	27.664	36.880	45.685	2054
2505	1.776	34.632	1.97	25.4	191.2	2.89		0.00		1.528	27.713	36.842	45.758	2540
3011	1.568	34.659	2.61	33.5	198.5	2.74		0.00		1.344	27.748	36.806	45.812	3057
3497	1.531	34.674	3.04	38.9						1.210	27.768	37.113	45.944	3554
3999	1.494	34.681	3.22	41.2	192.6					1.169	27.779	37.126	45.961	4058
4476	1.527	34.685	3.32	42.4	176.0					1.145	27.791	37.133	45.869	4760
4774	1.501	34.689	3.39	43.2	179.9	2.60		0.00		1.141	27.795	37.135	45.871	4866



# MARATHON 2 STA. 80

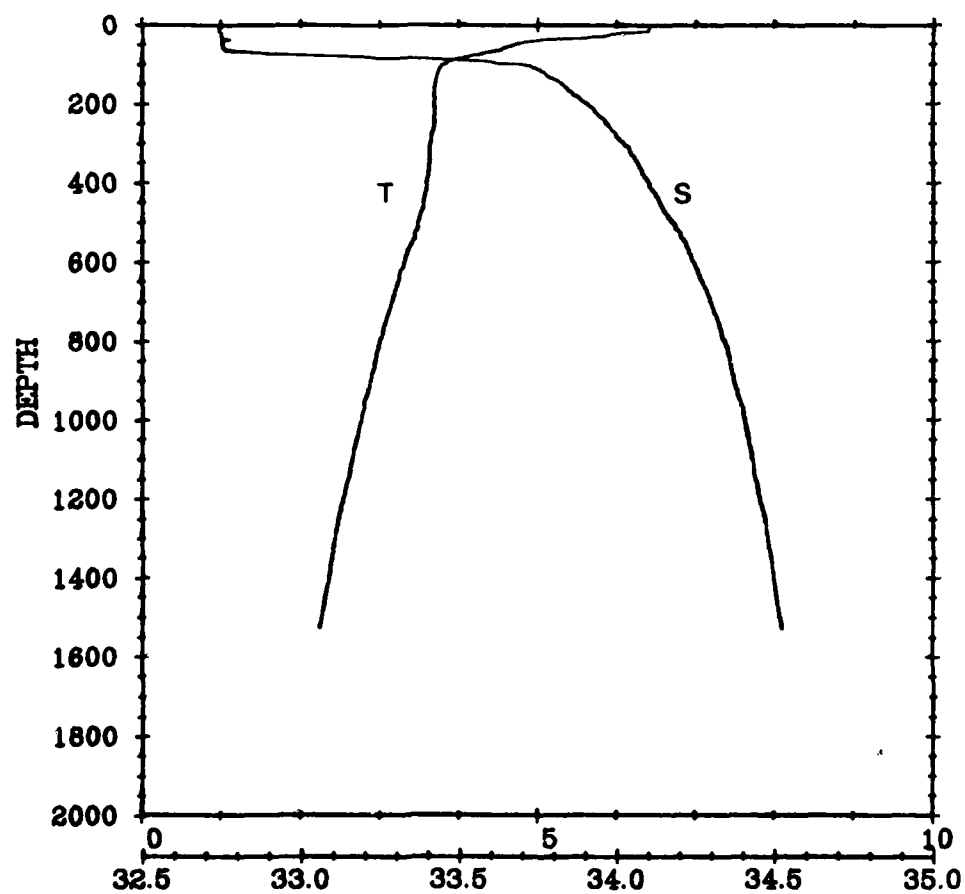
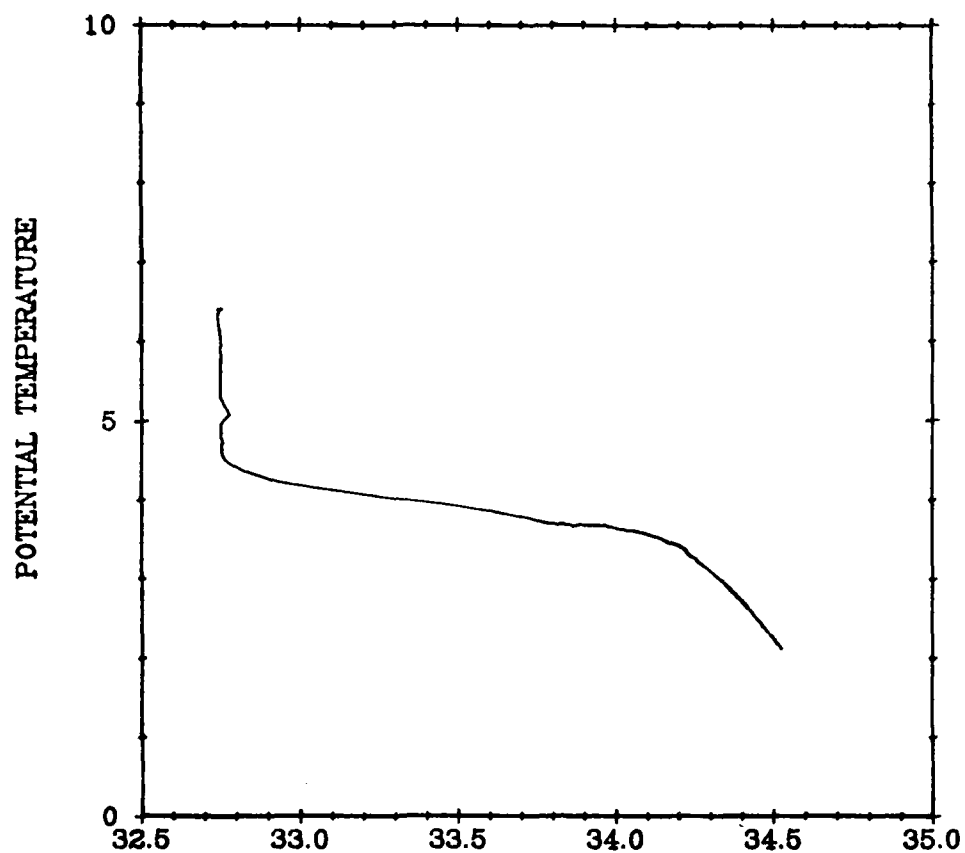


LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAR. M
			HMT	M	DIR	KT	DEG C	DEG C	MM
31 42 N	151 39 W	3 29 94	1649	45-5	070	10	10	9	1024

STATION DATA									
PRESS	TEMP	SALINITY	POT TEMP	SIGMA T	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM TSM		M
1	5.419	32.746	6.428	25.721	34.737	43.334	222.493	1.010	1.010
2	5.419	32.747	6.428	25.740	34.730	43.421	222.491	1.014	1.014
3	5.402	32.735	6.399	25.865	34.935	43.623	224.115	1.044	1.044
4	5.402	32.732	6.546	25.958	35.037	43.750	224.351	1.100	1.100
5	4.434	33.132	4.119	25.287	34.421	44.129	213.202	1.065	1.065
100	3.326	33.947	3.859	25.728	35.930	44.565	192.981	1.099	1.099
150	1.699	33.927	3.699	26.334	36.000	44.729	165.775	1.260	1.260
200	1.694	33.916	3.681	26.948	36.073	44.791	139.556	1.317	1.317
250	1.692	33.917	3.675	26.999	36.123	44.841	119.352	1.372	1.372
300	1.649	34.324	3.628	27.147	36.173	44.892	102.891	1.424	1.424
350	1.626	34.767	3.603	27.284	36.210	44.931	99.171	1.475	1.475
400	1.595	34.120	3.568	27.103	36.241	44.952	91.354	1.524	1.524
450	1.553	34.116	3.521	27.146	36.276	44.999	84.551	1.572	1.572
500	1.489	34.776	3.455	27.145	36.317	45.042	81.269	1.618	1.618
550	1.316	34.243	3.276	27.255	36.396	45.129	65.189	1.707	1.707
600	1.154	34.297	3.109	27.114	36.463	45.204	49.157	1.789	1.789
650	1.112	34.319	2.959	27.161	36.507	45.265	36.192	1.867	1.867
700	2.899	34.371	2.810	27.399	36.551	45.314	31.134	1.942	1.942
1000	2.752	34.404	2.696	27.436	36.635	45.365	59.924	1.914	1.939
1100	2.654	34.430	2.592	27.467	36.642	45.407	67.407	1.102	1.099
1200	2.552	34.452	2.473	27.494	36.674	45.445	65.205	1.149	1.237
1300	2.439	34.478	2.353	27.525	36.711	45.487	62.559	1.213	1.235
1400	2.360	34.495	2.268	27.546	36.736	45.516	63.922	1.274	1.344
1500	2.275	34.514	2.176	27.568	36.754	45.543	59.042	1.334	1.432
1546	2.229	34.524	2.126	27.590	36.778	45.565	57.985	1.361	1.519

WISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 3	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TU/IN	DEG C				DB
3	6.377	32.747	7.42	106.6	28.7	1.44	15.2	0.17		6.377	25.726	34.733	43.342	3
12	6.351	32.747	7.39	106.1	28.7	1.43	15.2	0.17		6.350	25.729	34.738	43.348	11
49	4.985	32.754	7.41	102.2	30.5	2.51	15.6	0.13		4.981	25.931	35.522	43.710	49
99	3.919	33.554	2.9	37.9	70.2	2.66	18.1	0.01		3.811	26.742	35.864	44.580	99
146	3.771	33.821	1.63	22.1	93.8	2.92	42.8	0.00		3.691	26.879	36.304	44.724	147
199	3.933	33.999	1.5	15.6	91.9	3.11	44.1	0.00		3.670	26.943	36.268	44.787	200
299	3.555	34.011	0.34	11.4	105.5	3.07	44.9	0.00		3.635	27.036	36.161	44.880	301
397	3.393	34.152	0.8	12.6	114.6	3.05	44.7	0.00		3.566	27.115	36.242	44.964	400
491	3.486	34.179	0.0	9.5	122.5	3.05	44.7	0.00		3.453	27.187	36.219	45.044	495
591	3.291	34.249	0.59	7.9	132.1	3.09	45.1	0.00		3.251	27.262	36.404	45.138	596
690	3.155	34.295	0.59	7.9	118.7	3.09	45.1	0.00	0.34	3.129	27.312	36.461	45.201	696
793	3.220	34.325	0.54	7.2	142.2	3.11	45.2	0.00	0.10	2.967	27.357	36.512	45.265	800
897	2.985	34.371	0.51	6.8	145.2	3.13	45.5	0.00	0.14	2.825	27.399	36.561	45.315	906
975	2.770	34.402	0.47	6.2	152.5	3.13	45.9	0.00		2.705	27.434	36.602	45.362	986
1234	2.470	34.469	0.51	6.7	154.8	3.12	45.9	0.00		2.388	27.515	36.699	45.473	1247
1524	2.232	34.524	0.5	9.8	172.4		45.4	0.00		2.130	27.580	36.777	45.564	1541

# MARATHON 2 STA. 81



LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB SALIN M  
 12 44 N 151 53 W 1 24 94 2124 4351 210 14 12.9 12.9 12.9 12.9 4

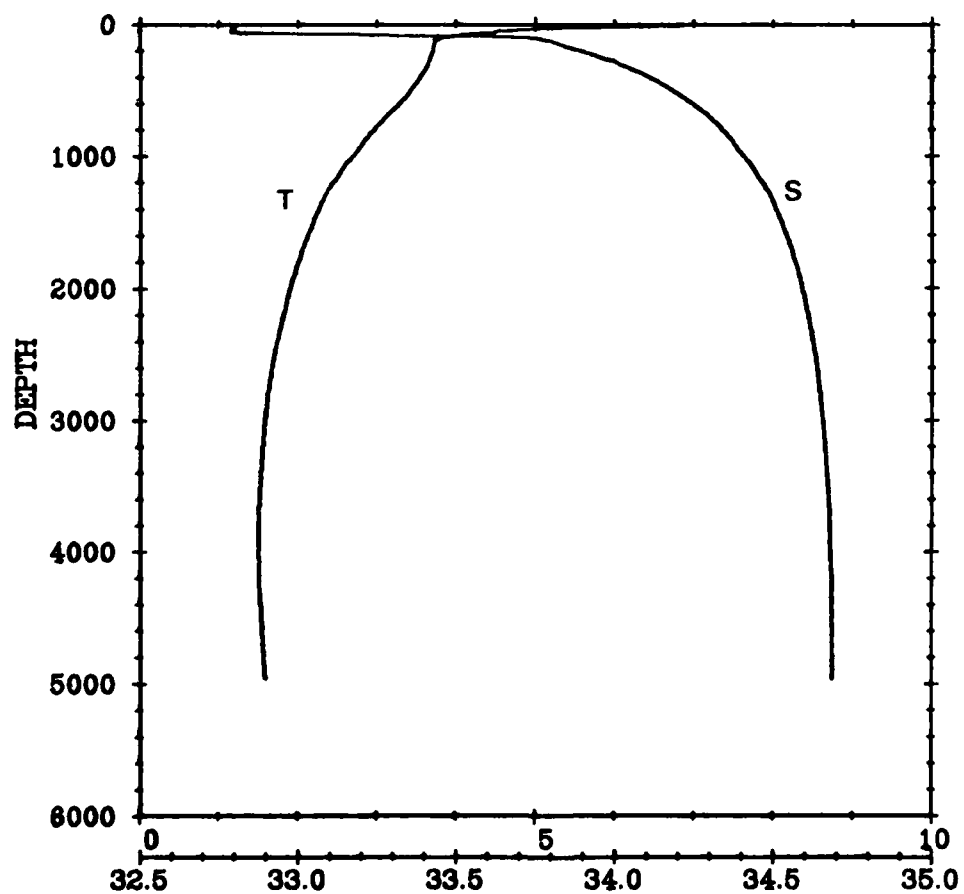
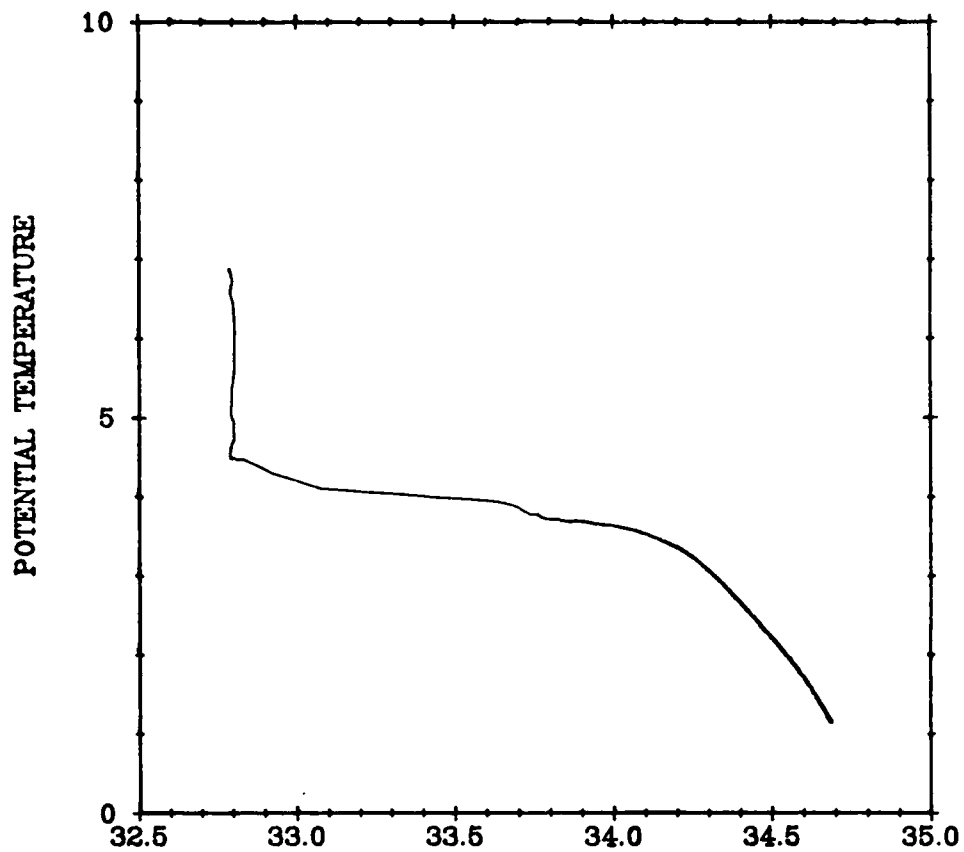
STD DATA

DEPT	TEMP	SALINITY	POT TEMP	SIGMA 1	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				ML TON		M
1	12.94	34.94	12.94	25.994	14.873	43.265	228.615	1.171	1
2	12.93	34.93	12.93	25.997	14.876	43.413	228.196	0.147	2
3	12.92	34.92	12.92	25.999	14.878	43.561	227.777	0.147	3
4	12.91	34.91	12.91	25.999	14.878	43.709	227.358	0.147	4
5	12.90	34.90	12.90	25.999	14.878	43.857	226.939	0.147	5
6	12.89	34.89	12.89	25.999	14.878	44.005	226.520	0.147	6
7	12.88	34.88	12.88	25.999	14.878	44.153	226.101	0.147	7
8	12.87	34.87	12.87	25.999	14.878	44.301	225.682	0.147	8
9	12.86	34.86	12.86	25.999	14.878	44.449	225.263	0.147	9
10	12.85	34.85	12.85	25.999	14.878	44.597	224.844	0.147	10
11	12.84	34.84	12.84	25.999	14.878	44.745	224.425	0.147	11
12	12.83	34.83	12.83	25.999	14.878	44.893	224.006	0.147	12
13	12.82	34.82	12.82	25.999	14.878	45.041	223.587	0.147	13
14	12.81	34.81	12.81	25.999	14.878	45.189	223.168	0.147	14
15	12.80	34.80	12.80	25.999	14.878	45.337	222.749	0.147	15
16	12.79	34.79	12.79	25.999	14.878	45.485	222.330	0.147	16
17	12.78	34.78	12.78	25.999	14.878	45.633	221.911	0.147	17
18	12.77	34.77	12.77	25.999	14.878	45.781	221.492	0.147	18
19	12.76	34.76	12.76	25.999	14.878	45.929	221.073	0.147	19
20	12.75	34.75	12.75	25.999	14.878	46.077	220.654	0.147	20
21	12.74	34.74	12.74	25.999	14.878	46.225	220.235	0.147	21
22	12.73	34.73	12.73	25.999	14.878	46.373	219.816	0.147	22
23	12.72	34.72	12.72	25.999	14.878	46.521	219.397	0.147	23
24	12.71	34.71	12.71	25.999	14.878	46.669	218.978	0.147	24
25	12.70	34.70	12.70	25.999	14.878	46.817	218.559	0.147	25
26	12.69	34.69	12.69	25.999	14.878	46.965	218.140	0.147	26
27	12.68	34.68	12.68	25.999	14.878	47.113	217.721	0.147	27
28	12.67	34.67	12.67	25.999	14.878	47.261	217.302	0.147	28
29	12.66	34.66	12.66	25.999	14.878	47.409	216.883	0.147	29
30	12.65	34.65	12.65	25.999	14.878	47.557	216.464	0.147	30
31	12.64	34.64	12.64	25.999	14.878	47.705	216.045	0.147	31
32	12.63	34.63	12.63	25.999	14.878	47.853	215.626	0.147	32
33	12.62	34.62	12.62	25.999	14.878	48.001	215.207	0.147	33
34	12.61	34.61	12.61	25.999	14.878	48.149	214.788	0.147	34
35	12.60	34.60	12.60	25.999	14.878	48.297	214.369	0.147	35
36	12.59	34.59	12.59	25.999	14.878	48.445	213.950	0.147	36
37	12.58	34.58	12.58	25.999	14.878	48.593	213.531	0.147	37
38	12.57	34.57	12.57	25.999	14.878	48.741	213.112	0.147	38
39	12.56	34.56	12.56	25.999	14.878	48.889	212.693	0.147	39
40	12.55	34.55	12.55	25.999	14.878	49.037	212.274	0.147	40
41	12.54	34.54	12.54	25.999	14.878	49.185	211.855	0.147	41
42	12.53	34.53	12.53	25.999	14.878	49.333	211.436	0.147	42
43	12.52	34.52	12.52	25.999	14.878	49.481	211.017	0.147	43
44	12.51	34.51	12.51	25.999	14.878	49.629	210.598	0.147	44
45	12.50	34.50	12.50	25.999	14.878	49.777	210.179	0.147	45
46	12.49	34.49	12.49	25.999	14.878	49.925	209.760	0.147	46
47	12.48	34.48	12.48	25.999	14.878	50.073	209.341	0.147	47
48	12.47	34.47	12.47	25.999	14.878	50.221	208.922	0.147	48
49	12.46	34.46	12.46	25.999	14.878	50.369	208.503	0.147	49
50	12.45	34.45	12.45	25.999	14.878	50.517	208.084	0.147	50
51	12.44	34.44	12.44	25.999	14.878	50.665	207.665	0.147	51
52	12.43	34.43	12.43	25.999	14.878	50.813	207.246	0.147	52
53	12.42	34.42	12.42	25.999	14.878	50.961	206.827	0.147	53
54	12.41	34.41	12.41	25.999	14.878	51.109	206.408	0.147	54
55	12.40	34.40	12.40	25.999	14.878	51.257	205.989	0.147	55
56	12.39	34.39	12.39	25.999	14.878	51.405	205.570	0.147	56
57	12.38	34.38	12.38	25.999	14.878	51.553	205.151	0.147	57
58	12.37	34.37	12.37	25.999	14.878	51.701	204.732	0.147	58
59	12.36	34.36	12.36	25.999	14.878	51.849	204.313	0.147	59
60	12.35	34.35	12.35	25.999	14.878	51.997	203.894	0.147	60
61	12.34	34.34	12.34	25.999	14.878	52.145	203.475	0.147	61
62	12.33	34.33	12.33	25.999	14.878	52.293	203.056	0.147	62
63	12.32	34.32	12.32	25.999	14.878	52.441	202.637	0.147	63
64	12.31	34.31	12.31	25.999	14.878	52.589	202.218	0.147	64
65	12.30	34.30	12.30	25.999	14.878	52.737	201.799	0.147	65
66	12.29	34.29	12.29	25.999	14.878	52.885	201.380	0.147	66
67	12.28	34.28	12.28	25.999	14.878	53.033	200.961	0.147	67
68	12.27	34.27	12.27	25.999	14.878	53.181	200.542	0.147	68
69	12.26	34.26	12.26	25.999	14.878	53.329	200.123	0.147	69
70	12.25	34.25	12.25	25.999	14.878	53.477	199.704	0.147	70
71	12.24	34.24	12.24	25.999	14.878	53.625	199.285	0.147	71
72	12.23	34.23	12.23	25.999	14.878	53.773	198.866	0.147	72
73	12.22	34.22	12.22	25.999	14.878	53.921	198.447	0.147	73
74	12.21	34.21	12.21	25.999	14.878	54.069	198.028	0.147	74
75	12.20	34.20	12.20	25.999	14.878	54.217	197.609	0.147	75
76	12.19	34.19	12.19	25.999	14.878	54.365	197.190	0.147	76
77	12.18	34.18	12.18	25.999	14.878	54.513	196.771	0.147	77
78	12.17	34.17	12.17	25.999	14.878	54.661	196.352	0.147	78
79	12.16	34.16	12.16	25.999	14.878	54.809	195.933	0.147	79
80	12.15	34.15	12.15	25.999	14.878	54.957	195.514	0.147	80
81	12.14	34.14	12.14	25.999	14.878	55.105	195.095	0.147	81
82	12.13	34.13	12.13	25.999	14.878	55.253	194.676	0.147	82
83	12.12	34.12	12.12	25.999	14.878	55.401	194.257	0.147	83
84	12.11	34.11	12.11	25.999	14.878	55.549	193.838	0.147	84
85	12.10	34.10	12.10	25.999	14.878	55.697	193.419	0.147	85
86	12.09	34.09	12.09	25.999	14.878	55.845	192.999	0.147	86
87	12.08	34.08	12.08	25.999	14.878	55.993	192.580	0.147	87
88	12.07	34.07	12.07	25.999	14.878	56.141	192.161	0.147	88
89	12.06	34.06	12.06	25.999	14.878	56.289	191.742	0.147	89
90	12.05	34.05	12.05	25.999	14.878	56.437	191.323	0.147	90
91	12.04	34.04	12.04	25.999	14.878	56.585	190.904	0.147	91
92	12.03	34.03	12.03	25.999	14.878	56.733	190.485	0.147	92
93	12.02	34.02	12.02	25.999	14.878	56.881	190.066	0.147	93
94	12.01	34.01	12.01	25.999	14.878	57.029	189.647	0.147	94
95	12.00	34.00	12.00	25.999	14.878	57.177	189.228	0.147	95
96	11.99	33.99	11.99	25.999	14.878	57.325	188.809	0.147	96
97	11.98	33.98	11.98	25.999	14.878	57.473	188.390	0.147	97
98	11.97	33.97	11.97	25.999	14.878	57.621	187.971	0.147	98
99	11.96	33.96	11.96	25.999	14.878	57.769	187.552	0.147	99
100	11.95	33.95	11.95	25.999	14.878	57.917	187.133	0.147	100

WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TU81N	DEG C				DB
1	6.978	32.799	7.33	106.6	29.9	1.43	15.8	0.18	6.878	25.701	34.684	43.269	4	
2	6.968	32.798	7.35	106.9	29.3	1.43	15.8	0.18	6.897	25.700	34.682	43.267	2	
3	6.955	32.799	7.51	104.4	27.2	1.45	16.0	0.19	5.002	25.930	35.025	43.676	37	
4	4.930	32.934	7.24	99.5	31.3	1.60	18.2	0.18	4.485	26.014	35.114	43.810	67	
5	3.718	33.800	1.71	23.2	82.5	2.90	42.0	0.01	3.709	26.861	35.995	44.704	110	
6	3.707	33.893	1.06	14.4	92.5	3.03	44.3	0.01	3.694	26.928	36.052	44.771	194	
7	3.694	34.011	0.71	3.6	105.6	3.09	45.0	0.01	3.626	27.037	36.162	44.882	295	
8	3.756	34.105	0.63	8.5	117.3	3.09	44.8	0.01	3.529	27.121	36.250	44.973	397	
9	3.414	34.180	0.58	7.8	125.5	3.09	44.9	0.00	3.401	27.193	36.328	45.056	499	
9	3.298	34.244	0.46	6.2	133.6	3.10	45.1	0.00	3.259	27.258	36.399	45.133	602	
6	3.120	34.300	0.51	6.9	140.0	3.10	44.9	0.00	3.073	27.320	36.470	45.212	704	
4	2.979	34.340	0.51	6.8	145.8	3.10	45.0	0.00	2.925	27.365	36.522	45.271	801	
3	2.924	34.379	0.47	6.3	151.5	3.12	45.1	0.00	2.765	27.410	36.576	45.333	906	
3	2.707	34.407	0.50	6.6	156.7	3.12	45.2	0.00	2.641	27.443	36.615	45.378	1003	
12	2.484	34.470	0.58	7.6	166.6	3.11	44.9	0.00	2.355	27.518	36.704	45.481	1219	
14	2.199	34.529	0.93	10.9	174.5	3.06	44.5	0.00	2.019	27.597	36.787	45.576	1510	
17	2.012	34.565	1.10	14.3	177.5	3.01	43.9	0.00	1.915	27.630	36.838	45.636	1764	
19	1.951	34.592			179.7	2.95	43.2	0.00	1.768	27.663	36.879	45.684	2005	
24	1.632		2.01	25.9	180.0	2.88	41.4	0.00	1.524	27.713	36.942	45.759	2521	
28	1.383	34.656	2.35	32.8	181.0	2.82	40.2	0.00	1.392	27.747	36.982	45.807	2982	
33	1.504	34.676	3.01	38.6	174.5	2.83	38.6	0.00	1.231	27.769	37.014	45.845	3629	
36	1.574	34.680	3.21	41.1	173.6	2.59	38.1	0.00	1.181	27.776	37.024	45.858	4037	
44	1.713	34.685	3.31	42.3	176.0		37.9	0.00	1.152	27.782	37.031	45.867	4549	
49	1.584	34.695	3.34	42.7	174.9	2.56	37.5	0.00	1.141	27.783	37.033	45.869	5055	

# MARATHON 2 STA. 82



LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
					GMT	M	DIR	KT	DEG C	DEG C	MM
52 32.2N	152 0 6W	5	10	94	510	4467	070	15	5	4	1022.4

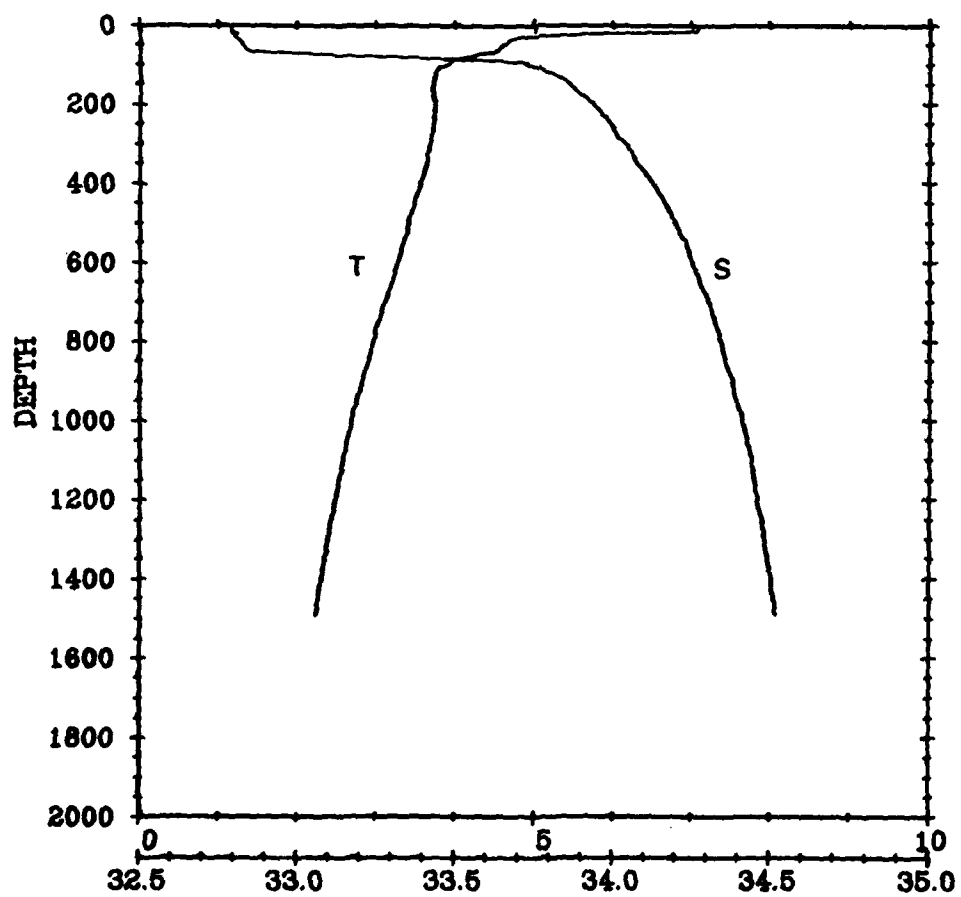
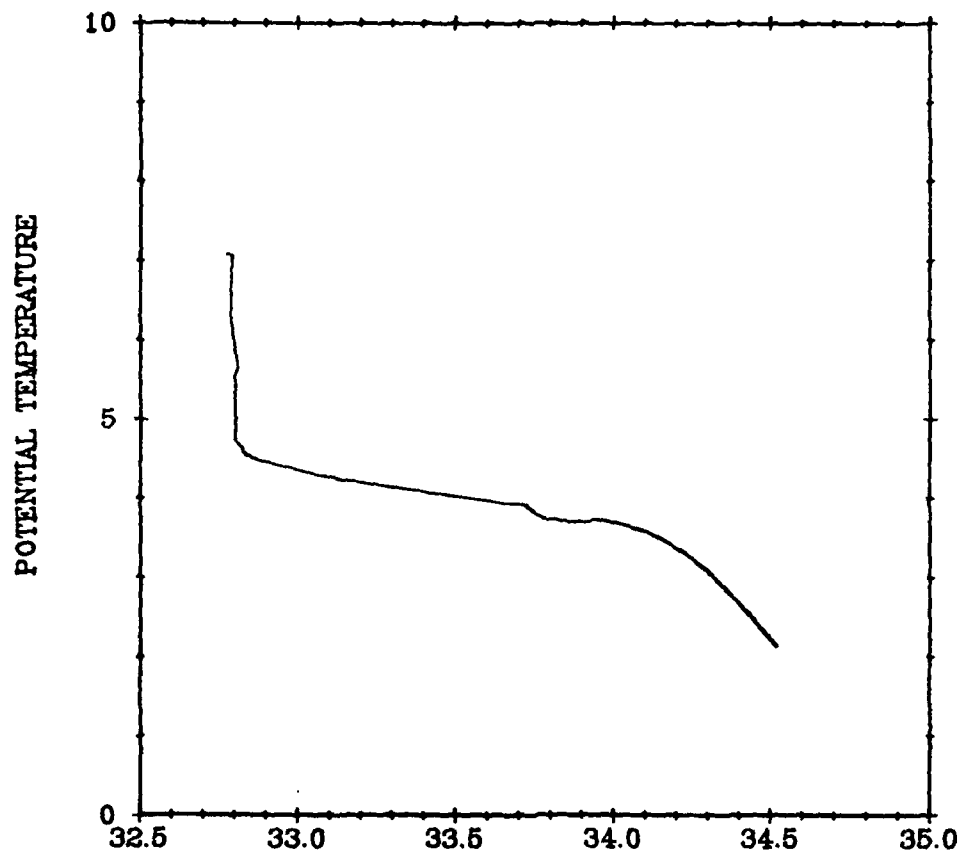
## STD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CM/TON		M
0	1.55	32.788	1.063	25.648	34.543	43.220	231.199	0.100	0
20	1.58	32.797	1.066	25.792	34.819	43.426	219.722	0.105	19
40	1.72	32.814	1.079	25.973	35.062	43.747	202.575	0.107	39
60	1.84	32.848	1.090	26.119	35.107	43.819	199.167	0.107	59
80	1.94	33.257	1.119	26.192	35.491	44.135	184.139	0.104	79
100	1.992	33.704	1.185	26.767	35.884	44.596	127.727	0.191	99
120	1.715	33.862	1.705	26.910	36.015	44.753	114.494	0.203	119
140	1.741	33.934	1.728	26.966	36.087	44.803	109.710	0.209	139
160	1.724	33.939	1.707	27.011	36.133	44.849	105.792	0.203	159
180	1.697	34.036	1.660	27.053	36.177	44.895	102.206	0.205	179
200	1.633	34.074	1.612	27.089	36.214	44.933	99.282	0.206	199
220	1.565	34.125	1.539	27.136	36.265	44.987	95.135	0.214	219
240	1.491	34.163	1.461	27.174	36.306	45.031	91.897	0.201	239
260	1.415	34.195	1.382	27.207	36.343	45.072	89.089	0.205	259
280	1.275	34.250	1.235	27.265	36.407	45.143	84.243	0.203	279
300	1.117	34.302	1.071	27.322	36.472	45.215	79.401	0.205	299
320	0.970	34.341	0.917	27.367	36.525	45.274	75.504	0.202	319
340	0.833	34.377	0.774	27.408	36.573	45.329	72.097	0.206	339
360	0.697	34.409	0.632	27.446	36.618	45.381	68.861	0.207	359
380	0.586	34.438	0.514	27.479	36.657	45.426	66.076	1.164	379
400	0.491	34.458	0.412	27.504	36.687	45.461	64.097	1.129	399
420	0.399	34.480	0.314	27.530	36.718	45.496	61.972	1.192	419
440	0.317	34.499	0.225	27.552	36.745	45.528	60.148	1.253	439
460	0.243	34.515	0.144	27.572	36.769	45.555	58.607	1.313	459
480	0.233	34.519	0.134	27.576	36.773	45.560	58.236	1.317	479

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
3	1.568	32.799	7.31	106.8	31.1	1.48	16.5	0.16	7.068	25.676	34.550	43.227		3
15	1.546	32.798	7.32	106.9	31.3	1.48	16.5	0.16	7.045	25.678	34.553	43.231		15
34	1.519	32.802	7.62	106.5	31.3	1.50	16.9	0.16	5.215	25.909	34.972	43.634		34
51	1.594	32.825	7.32	100.9	33.1	1.59	18.5	0.14	4.390	25.995	35.190	43.781		51
101	1.557	33.486	3.49	47.6	62.3	2.48	34.4	0.07	4.043	26.577	35.690	44.397		101
154	1.727	33.852	1.31	11.8	99.0	2.96	43.0	0.07	3.127	26.901	36.225	44.742		154
204	1.745	33.932	0.80	10.9	94.3	3.08	44.7	0.07	3.131	26.964	36.085	44.801		205
252	1.573	34.241	0.58	7.9	108.4	3.11	44.9	0.07	3.553	27.058	36.192	44.970		304
401	1.552	34.128	0.33	7.2	118.5	3.10	44.6	0.07	3.524	27.140	36.269	44.992		404
497	1.414	34.198	0.50	6.7	125.1	3.11	44.5	0.00	3.181	27.209	36.145	45.074		501
597	1.281	34.250	0.51	6.9	131.5	3.10	44.5	0.00	3.241	27.264	36.406	45.141		602
697	1.129	34.299	0.50	5.7	137.2	3.09	44.5	0.00	3.382	27.318	36.468	45.210		703
804	0.961	34.344	0.49	6.5	145.6	3.10	44.5	0.00	2.908	27.370	36.528	45.278		811
905	0.925	34.379	0.54	7.2	146.9	3.11	44.7	0.00	2.765	27.410	36.576	45.333		914
1001	0.698	34.411	0.50	6.6	153.3	3.09	44.7	0.00	2.532	27.448	36.620	45.383		1011
1251	0.431	34.474	0.60	7.9	159.2	3.08	44.7	0.00	2.148	27.522	36.708	45.495		1264
1493	0.235	34.520	0.76	10.0	168.0		44.5	0.00	2.136	27.576	36.773	45.560		1505

# MARATHON 2 STA. 83



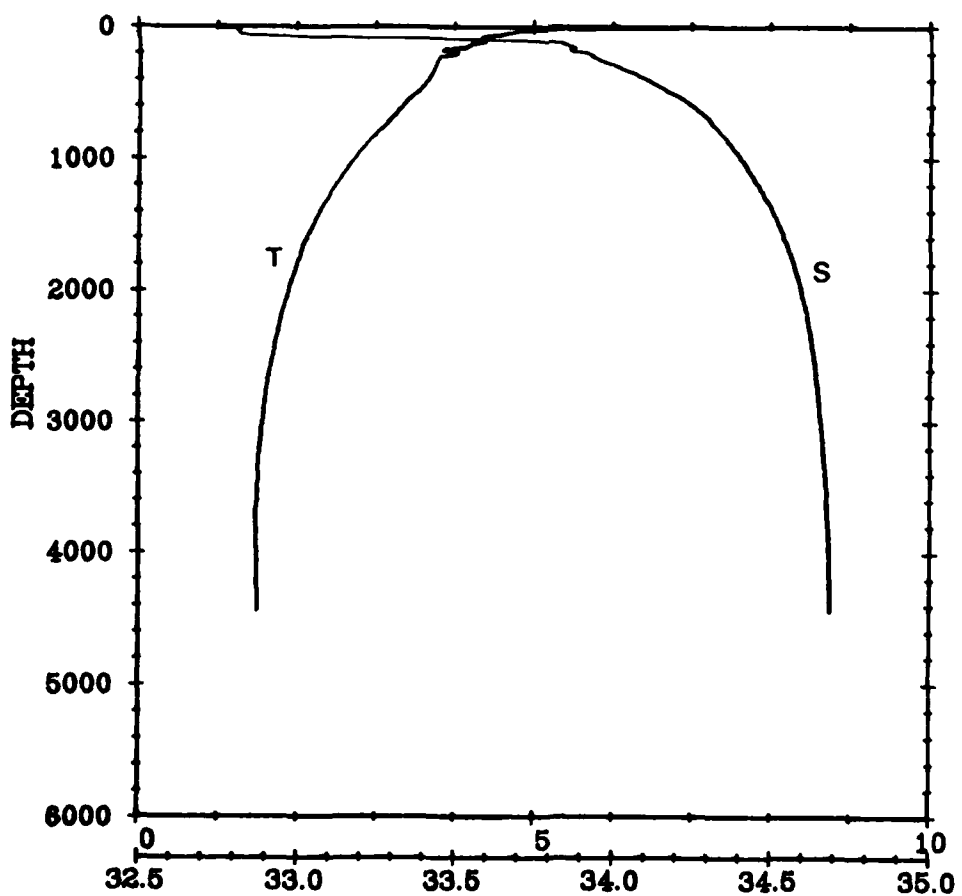
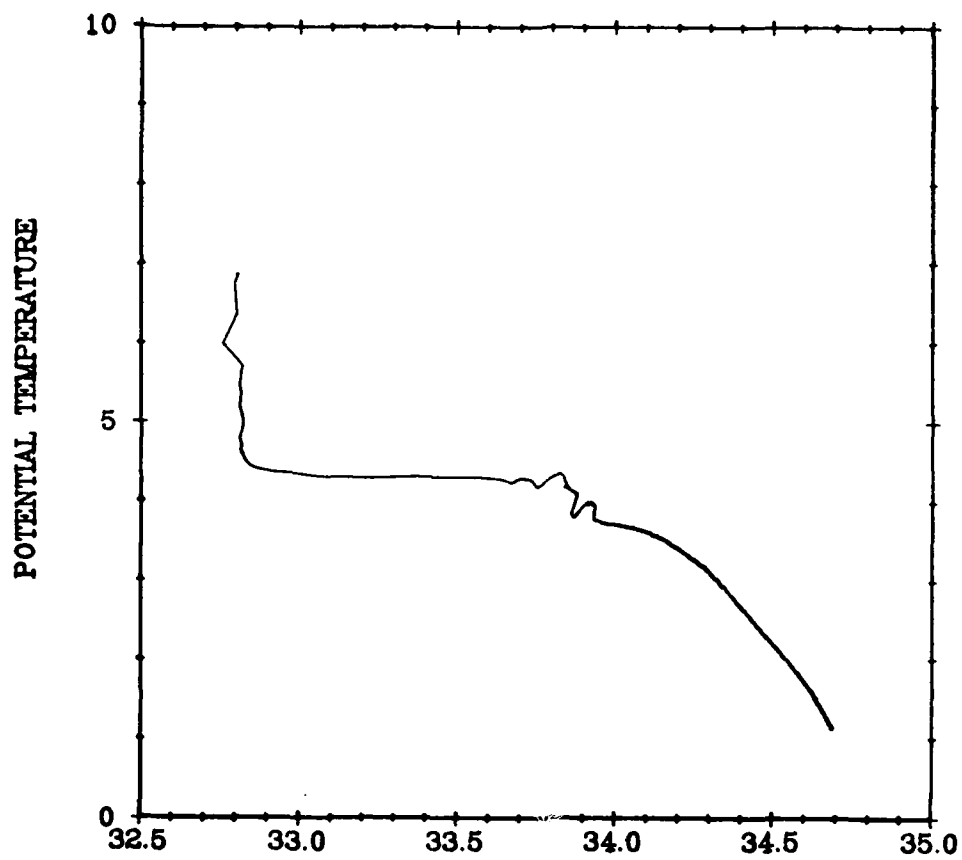
LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
52 59 N	181 03 W	5/30/84	1136	4448	240	16	12	10	1012

STD DATA										
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SWA	DYNAMIC HT	DEPTH	
DB	DEG C		DEG C				CL TON		M	
1	921	12 932	9 921	25 742	34 697	43 295	52 193	1 310		
20	920	12 937	9 920	25 956	34 895	43 594	52 388	1 344		
40	920	12 936	9 920	25 969	35 094	43 796	52 396	1 395		
60	929	12 942	9 925	26 126	35 144	43 828	52 456	1 446		
80	943	13 132	9 937	26 258	35 252	44 260	52 561	1 511		
100	944	13 628	9 987	26 565	35 793	44 856	52 745	1 595		
120	943	13 857	9 933	26 871	35 973	44 670	52 852	1 299		
140	992	13 912	9 978	26 923	35 032	44 735	52 857	1 317		
160	993	13 951	9 953	26 977	35 097	44 811	52 924	1 372		
180	992	14 037	9 912	27 025	35 147	44 852	52 955	1 426		
200	992	14 058	9 958	27 070	35 193	44 910	52 993	1 477		
220	994	14 093	9 919	27 108	35 232	44 951	52 999	1 527		
240	992	14 139	9 952	27 146	35 274	44 995	52 924	1 575		
260	993	14 175	9 969	27 183	35 314	45 039	52 997	1 622		
280	992	14 246	9 992	27 257	35 397	45 130	53 027	1 700		
300	992	14 297	9 925	27 313	35 460	45 200	53 044	1 773		
320	993	14 334	9 960	27 357	35 513	45 261	53 075	1 811		
340	999	14 371	9 900	27 401	35 565	45 320	52 918	1 846		
360	992	14 400	9 959	27 437	35 608	45 369	52 927	1 877		
380	997	14 428	9 935	27 469	35 647	45 414	52 941	1 886		
400	990	14 454	9 941	27 501	35 684	45 458	52 981	1 917		
420	996	14 478	9 901	27 529	35 718	45 497	52 977	1 925		
440	995	14 501	9 923	27 556	35 751	45 535	52 945	1 954		
460	992	14 519	9 908	27 578	35 777	45 565	52 907	1 934		
480	992	14 539	9 919	27 601	35 805	45 597	52 918	1 931		
500	998	14 554	9 945	27 619	35 826	45 622	52 904	1 946		
520	994	14 568	9 974	27 635	35 846	45 645	52 943	1 900		
540	992	14 590	9 915	27 650	35 864	45 666	52 947	1 953		
560	997	14 591	9 952	27 663	35 881	45 686	52 968	1 924		
580	994	14 600	9 902	27 674	35 894	45 702	52 961	1 955		
600	994	14 610	9 944	27 687	35 910	45 721	52 976	1 924		
620	992	14 617	9 924	27 695	35 921	45 733	52 917	1 953		
640	992	14 624	9 956	27 704	35 932	45 747	52 942	1 902		
660	992	14 630	9 918	27 712	35 942	45 759	52 952	1 949		
680	999	14 636	9 975	27 720	35 952	45 771	52 911	1 897		
700	992	14 642	9 916	27 729	35 962	45 783	52 969	1 943		
720	994	14 647	9 904	27 734	35 970	45 792	52 907	1 949		
740	995	14 651	9 935	27 739	35 976	45 801	52 962	2 035		
760	995	14 655	9 953	27 744	35 993	45 808	52 977	2 081		
780	992	14 659	9 920	27 749	35 990	45 817	52 945	2 126		
800	992	14 663	9 995	27 754	35 996	45 824	52 931	2 171		
820	991	14 666	9 970	27 759	37 002	45 831	44 856	2 216		
840	994	14 669	9 948	27 762	37 007	45 838	44 763	2 261		
860	997	14 671	9 931	27 765	37 011	45 842	44 779	2 306		
880	999	14 674	9 912	27 769	37 016	45 848	44 700	2 351		
900	994	14 676	9 939	27 772	37 019	45 852	44 762	2 395		
920	997	14 678	9 923	27 774	37 022	45 856	44 822	2 440		
940	997	14 680	9 930	27 776	37 025	45 859	44 942	2 485		
960	997	14 681	9 931	27 778	37 027	45 862	45 178	2 530		
980	997	14 682	9 932	27 779	37 029	45 864	45 414	2 575		
1000	999	14 683	9 933	27 781	37 031	45 865	45 633	2 621		
1020	999	14 684	9 934	27 783	37 033	45 869	45 797	2 667		
1040	999	14 685	9 935	27 783	37 034	45 871	45 117	2 713		
1060	999	14 687	9 937	27 785	37 036	45 873	46 314	2 759		
1080	999	14 687	9 937	27 785	37 036	45 873	46 453	2 772		

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	PC4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
6	6.974	32.812	7.29	106.0	33.0	1.52	17.2	0.19		6.974	25.712	34.695	43.281	1
54	4.620	32.823	7.27	100.2	32.9	1.52	19.4	0.20		4.616	25.991	35.095	43.774	54
125	4.311	33.724	2.26	31.1	70.3	2.72	38.6	0.01		4.304	26.740	35.835	44.526	105
155	4.129	33.977	1.33	18.2	82.6	2.95	42.3	0.01		4.118	26.881	35.993	44.680	156
229	4.021	33.931	0.97	13.3	90.0	3.04	43.6	0.00		4.006	26.935	36.042	44.744	210
322	3.729	34.014	0.54	7.3	104.8	3.15	45.4	0.00		3.708	27.031	36.152	44.969	304
405	3.638	34.112	0.48	6.5	114.5	3.13	45.0	0.00		3.610	27.119	36.244	44.962	408
499	3.497	34.191	0.42	5.7	122.9	3.15	45.0	0.00		3.463	27.188	36.319	45.145	503
604	3.314	34.254	0.41	5.5	132.1	3.14	45.1	0.00		3.273	27.264	36.405	45.139	609
699	3.166	34.303	0.38	5.1	140.3	3.16	45.0	0.00		3.119	27.319	36.465	45.206	705
797	3.209	34.319	0.43	5.7	146.9	3.15	45.1	0.00		2.956	27.361	36.517	45.265	804
897	2.955	34.376	0.44	5.9	151.2	3.14	45.1	0.00		2.795	27.405	36.569	45.324	906
991	2.725	34.404	0.47	6.2	158.6	3.15	45.0	0.00		2.659	27.440	36.610	45.372	1001
1243	2.432	34.471	0.50	7.9	168.0	3.12	44.6	0.00		2.350	27.519	36.706	45.482	1253
1477	2.210	34.522	0.58	11.0	174.3	3.02	44.3	0.00		2.112	27.580	36.778	45.566	1494
1729	1.934	34.564	1.24	15.5	178.8	2.92	43.4	0.00		1.918	27.630	36.839	45.636	1765
1985	1.884	34.595	1.49	19.3	179.1	2.96	42.6	0.00		1.749	27.657	36.884	45.689	2010
2171	1.722	34.628	1.96	25.3	178.8	2.86	41.3	0.00		1.536	27.708	36.935	45.750	2403
2561	1.604	34.650	2.43	31.3	177.5	2.77	40.1	0.00		1.404	27.736	36.972	45.795	2802
3159	1.512	34.665	2.82	36.2	174.5	2.70	39.1	0.00		1.295	27.756	36.998	45.826	3207
3555	1.488	34.676	3.11	39.9	172.7	2.64	38.3	0.00		1.211	27.771	37.017	45.849	3609
3946	1.483	34.692	3.29	42.1	171.9	2.60	37.8	0.00		1.163	27.779	37.028	45.862	4015
4195	1.491	34.694	3.35	42.8	172.1		37.5	0.00		1.143	27.782	37.031	45.867	4271
4444	1.504	34.697	3.41	43.6	172.4	2.56	37.3	0.00		1.126	27.785	37.036	45.873	4521



# MARATHON 2 STA. 84



LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
 1 20 1N 151 59 4W 5 31 94 1943 4511 200 20 2 1 1019

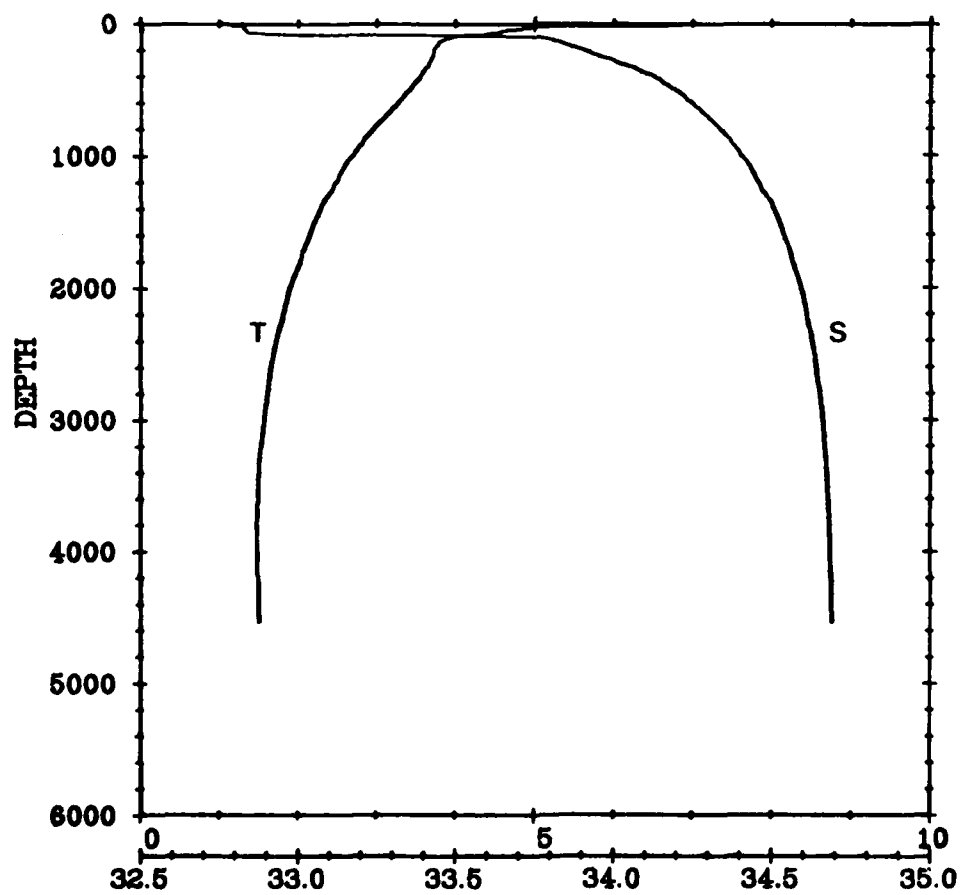
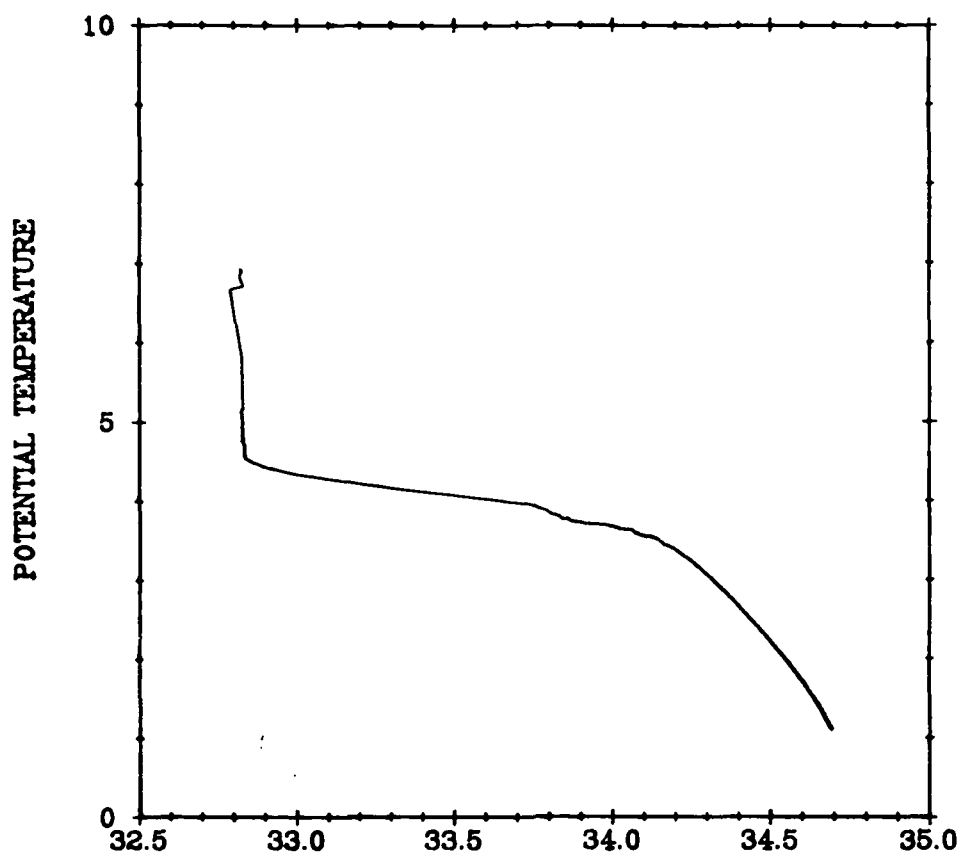
## WTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				DB		M
0	5.997	32.821	5.997	25.717	14.438	41.282	225.617	1.000	0
20	5.927	32.822	5.925	25.841	14.459	41.498	215.014	1.044	19
40	4.814	32.829	4.911	25.975	15.059	41.719	212.411	1.086	39
60	4.575	32.836	4.571	26.105	15.112	41.794	199.596	1.126	59
80	4.385	32.834	4.379	26.144	15.247	41.746	185.571	1.165	79
100	3.999	33.546	3.992	26.711	15.323	44.510	133.141	1.197	99
120	3.781	33.841	3.770	26.889	16.110	44.725	115.576	1.278	119
140	3.724	33.925	3.711	26.944	16.167	44.84	111.725	1.316	139
160	3.709	33.961	3.692	26.991	16.114	44.811	107.747	1.351	159
180	3.668	34.115	3.648	27.139	16.161	44.882	103.888	1.424	179
200	3.618	34.175	3.595	27.192	16.219	44.940	99.916	1.471	199
220	3.579	34.127	3.552	27.139	16.167	44.990	94.916	1.521	219
240	3.492	34.157	3.462	27.169	16.101	47.727	92.175	1.571	239
260	3.427	34.192	3.394	27.204	16.139	48.049	89.101	1.611	259
280	3.293	34.246	3.243	27.261	16.403	48.128	84.624	1.714	279
300	3.124	34.294	3.079	27.315	16.465	48.201	81.071	1.781	299
320	2.959	34.336	2.916	27.363	16.721	48.271	77.546	1.841	319
340	2.824	34.373	2.765	27.406	16.771	48.328	74.171	1.891	339
360	2.710	34.403	2.645	27.440	16.812	48.374	69.444	1.941	359
380	2.576	34.435	2.504	27.478	16.856	48.425	66.171	1.991	379
400	2.495	34.456	2.415	27.502	16.885	48.468	64.247	1.941	399
420	2.398	34.479	2.311	27.524	16.911	48.496	62.175	1.891	419
440	2.287	34.504	2.195	27.539	16.931	48.511	60.446	1.841	439
460	2.212	34.521	2.119	27.559	16.951	48.565	57.416	1.791	459
480	2.148	34.535	2.042	27.591	16.999	48.620	56.412	1.741	479
500	2.079	34.562	1.965	27.615	16.922	48.615	54.914	1.691	499
520	2.029	34.561	1.919	27.629	16.838	48.616	51.921	1.641	519
540	1.979	34.577	1.865	27.646	16.859	48.660	52.514	1.591	539
560	1.924	34.589	1.799	27.650	16.877	48.681	50.171	1.541	559
580	1.855	34.600	1.712	27.673	16.893	48.700	50.216	1.491	579
600	1.816	34.608	1.655	27.691	16.905	48.715	49.516	1.441	599
620	1.776	34.615	1.613	27.693	16.918	48.711	48.844	1.391	619
640	1.727	34.625	1.561	27.705	16.932	48.747	47.911	1.341	639
660	1.692	34.632	1.513	27.714	16.943	48.750	47.119	1.291	659
680	1.661	34.639	1.473	27.721	16.953	48.772	46.711	1.241	679
700	1.607	34.643	1.445	27.728	16.961	48.782	46.410	1.191	699
720	1.511	34.648	1.411	27.734	16.970	48.792	46.109	1.141	719
740	1.588	34.652	1.379	27.740	16.977	48.801	45.711	1.091	739
760	1.564	34.657	1.346	27.746	16.985	48.811	45.316	1.041	759
780	1.548	34.661	1.321	27.751	16.991	48.818	45.116	1.018	779
800	1.529	34.665	1.292	27.756	16.998	48.826	44.844	1.011	799
820	1.512	34.668	1.265	27.760	17.004	48.834	44.650	1.008	819
840	1.502	34.671	1.245	27.764	17.009	48.839	44.591	1.001	839
860	1.492	34.673	1.226	27.767	17.013	48.845	44.562	1.007	859
880	1.486	34.676	1.210	27.771	17.017	48.850	44.527	1.002	879
900	1.484	34.678	1.199	27.773	17.021	48.853	44.620	1.006	899
920	1.482	34.679	1.195	27.775	17.023	48.856	44.783	1.011	919
940	1.481	34.681	1.173	27.777	17.025	48.860	44.987	1.016	939
960	1.483	34.682	1.165	27.779	17.028	48.862	45.108	1.021	959
980	1.484	34.684	1.155	27.781	17.030	48.866	45.241	1.026	979
1000	1.486	34.684	1.145	27.782	17.032	48.867	45.500	1.031	999
1020	1.485	34.685	1.140	27.783	17.033	48.869	45.852	1.037	1019
1040	1.488	34.686	1.134	27.794	17.035	48.871	46.097	1.043	1039
1060	1.503	34.687	1.128	27.785	17.036	48.873	46.355	1.049	1059
1080	1.506	34.688	1.119	27.787	17.038	48.875	46.599	1.056	1079
1100	1.505	34.688	1.116	27.787	17.038	48.876	46.632	1.058	1099

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS G2	G2 CAT	SIG03	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L		UM/L	UM/L	UM/L	UM/L	TURIN	DEG C				DB
1	5.966	32.825	7.37	105.4	31.8	1.49	15.9	0.18	3.99	5.966	25.710	34.688	41.210	1
21	5.909	32.825	7.55	107.3	32.5	1.50	17.2	0.17		5.906	25.846	34.875	43.504	21
49	4.631	32.835	7.38	101.9	33.4	1.59	18.5	0.16		4.679	25.994	35.084	43.770	49
98	3.997	33.662	2.51	34.2	71.5	2.69	39.4	0.01	3.65	3.990	26.723	35.835	44.542	98
149	3.773	33.844	1.34	18.2	87.3	2.98	42.9	0.00	2.61	3.763	26.890	36.011	44.727	149
197	3.727	33.904	0.95	12.9	94.6	3.06	44.3	0.00	2.36	3.714	26.943	36.266	44.793	197
245	3.713	33.956	0.74	10.0	100.3	3.09	44.8	0.00	1.91	3.697	26.986	36.129	44.826	245
294	3.677	34.011	0.69	9.4	106.9	3.11	44.8	0.00	1.40	3.657	27.034	36.158	44.896	294
345	3.563	34.126	0.52	7.0	119.1	3.11	44.8	0.00	0.89	3.536	27.117	36.256	44.988	345
399	3.424	34.196	0.47	6.3	127.3	3.12	44.8	0.00	0.50	3.390	27.207	36.342	45.070	399
455	3.295	34.246	0.48	6.5	132.2	3.10	44.7	0.00	0.41	3.245	27.260	36.403	45.137	455
503	3.126	34.296	0.49	6.6	136.9	3.10	44.7	0.00	0.11	3.080	27.316	36.466	45.208	503
598	2.963	34.340			143.9	3.12	44.8	0.00	0.21	2.910	27.366	36.524	45.275	598
695	2.820	34.376	0.52	6.9	147.1	3.11	44.7	0.00	0.09	2.761	27.408	36.574	45.331	695
797	2.707	34.406	0.53	7.0	153.1	3.10	44.7	0.00		2.641	27.441	36.614	45.377	797
1249	2.418	34.472	0.61	8.0	160.1	3.09	44.4	0.00		2.355	27.520	36.776	45.482	1249
1574	2.200	34.526	0.84	11.0	170.4	3.06	44.2	0.00		2.150	27.584	36.783	45.571	1574
1726	2.056	34.560	1.19	14.2	173.6	3.02	43.6	0.00		1.940	27.624	36.811	45.627	1726
2009	1.980	34.595	1.50	19.5		2.95	42.7	0.00		1.743	27.667	36.895	45.690	2009
2491	1.685	34.635	2.09	27.0	174.0	2.82	41.0	0.00		1.508	27.717	36.947	45.764	2491
2942	1.579	34.660	2.66	34.2	174.0	2.70	39.5	0.00		1.337	27.749	36.988	45.814	2942
3495	1.496	34.670	3.09	39.6		2.63	38.3	0.00		1.215	27.770	37.016	45.848	3495
4046	1.484	34.683	3.30	42.2	171.1		37.7	0.00		1.153	27.780	37.030	45.865	4046
4533	1.504	34.688	3.45	44.2		2.54	37.1	0.00		1.116	27.787	37.038	45.876	4533

# MARATHON 2 STA. 85

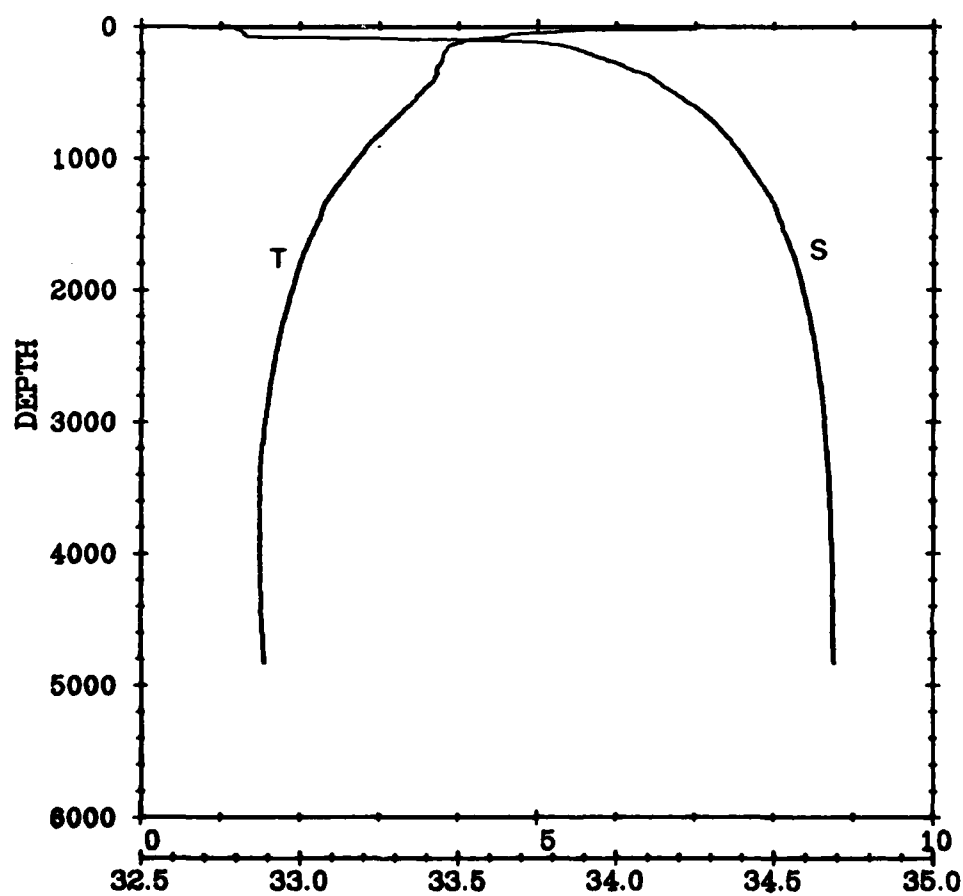
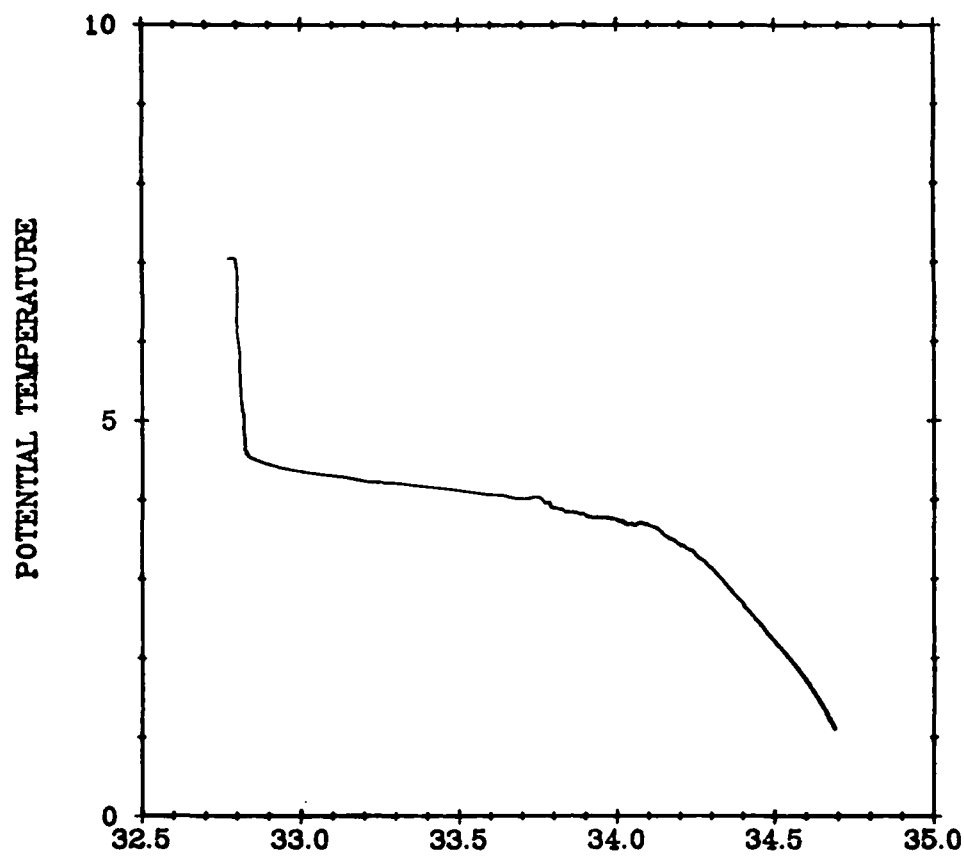


DATE: 11/11/84 TIME: 08:00 LATITUDE: 34 11 N LONGITUDE: 121 09 W DEPTH: 1000 M WIND: 210 KTS SPEED: 19 KTS AIR TEMP: 9.1 DEG C SURF WAVE: 9.1 M BAROM: 1014.2

DEPTH	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
0	12.22	34.742	12.22	15.477	14.453	43.212	210.175	1.770	0
10	12.391	34.741	12.391	15.481	14.459	43.339	224.447	1.745	10
20	12.523	34.741	12.523	15.481	14.463	43.544	237.591	1.699	20
30	12.614	34.742	12.614	15.481	14.472	43.706	249.919	1.630	30
40	12.655	34.746	12.655	15.483	14.482	43.836	261.424	1.559	40
50	12.674	34.754	12.674	15.484	14.491	44.294	274.222	1.474	50
60	12.678	34.761	12.678	15.484	14.495	44.546	286.454	1.372	60
70	12.678	34.762	12.678	15.483	14.501	44.64	297.877	1.250	70
80	12.674	34.762	12.674	15.483	14.502	44.815	308.488	1.106	80
90	12.674	34.763	12.674	15.483	14.503	44.867	318.280	0.939	90
100	12.674	34.768	12.674	15.483	14.506	44.921	327.249	0.749	100
110	12.674	34.768	12.674	15.483	14.506	44.974	335.404	0.539	110
120	12.674	34.768	12.674	15.483	14.506	44.974	342.844	0.309	120
130	12.674	34.768	12.674	15.483	14.506	44.974	349.564	0.069	130
140	12.674	34.768	12.674	15.483	14.506	44.974	355.564	-0.181	140
150	12.674	34.768	12.674	15.483	14.506	44.974	360.844	-0.411	150
160	12.674	34.768	12.674	15.483	14.506	44.974	365.384	-0.621	160
170	12.674	34.768	12.674	15.483	14.506	44.974	369.164	-0.801	170
180	12.674	34.768	12.674	15.483	14.506	44.974	372.164	-0.951	180
190	12.674	34.768	12.674	15.483	14.506	44.974	374.364	-1.071	190
200	12.674	34.768	12.674	15.483	14.506	44.974	375.724	-1.161	200
210	12.674	34.768	12.674	15.483	14.506	44.974	376.224	-1.221	210
220	12.674	34.768	12.674	15.483	14.506	44.974	376.824	-1.261	220
230	12.674	34.768	12.674	15.483	14.506	44.974	377.424	-1.281	230
240	12.674	34.768	12.674	15.483	14.506	44.974	378.024	-1.291	240
250	12.674	34.768	12.674	15.483	14.506	44.974	378.524	-1.291	250
260	12.674	34.768	12.674	15.483	14.506	44.974	379.024	-1.281	260
270	12.674	34.768	12.674	15.483	14.506	44.974	379.524	-1.261	270
280	12.674	34.768	12.674	15.483	14.506	44.974	380.024	-1.231	280
290	12.674	34.768	12.674	15.483	14.506	44.974	380.524	-1.181	290
300	12.674	34.768	12.674	15.483	14.506	44.974	381.024	-1.121	300
310	12.674	34.768	12.674	15.483	14.506	44.974	381.524	-1.041	310
320	12.674	34.768	12.674	15.483	14.506	44.974	382.024	-0.941	320
330	12.674	34.768	12.674	15.483	14.506	44.974	382.524	-0.821	330
340	12.674	34.768	12.674	15.483	14.506	44.974	383.024	-0.681	340
350	12.674	34.768	12.674	15.483	14.506	44.974	383.524	-0.521	350
360	12.674	34.768	12.674	15.483	14.506	44.974	384.024	-0.341	360
370	12.674	34.768	12.674	15.483	14.506	44.974	384.524	-0.141	370
380	12.674	34.768	12.674	15.483	14.506	44.974	385.024	0.071	380
390	12.674	34.768	12.674	15.483	14.506	44.974	385.524	0.271	390
400	12.674	34.768	12.674	15.483	14.506	44.974	386.024	0.451	400
410	12.674	34.768	12.674	15.483	14.506	44.974	386.524	0.611	410
420	12.674	34.768	12.674	15.483	14.506	44.974	387.024	0.751	420
430	12.674	34.768	12.674	15.483	14.506	44.974	387.524	0.871	430
440	12.674	34.768	12.674	15.483	14.506	44.974	388.024	0.971	440
450	12.674	34.768	12.674	15.483	14.506	44.974	388.524	1.051	450
460	12.674	34.768	12.674	15.483	14.506	44.974	389.024	1.111	460
470	12.674	34.768	12.674	15.483	14.506	44.974	389.524	1.151	470
480	12.674	34.768	12.674	15.483	14.506	44.974	390.024	1.171	480
490	12.674	34.768	12.674	15.483	14.506	44.974	390.524	1.181	490
500	12.674	34.768	12.674	15.483	14.506	44.974	391.024	1.181	500

WISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS 02	02 SAT	SIG03	P04	W03	W02	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L		UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	12.699	34.813	7.31	106.6	31.9	1.48	16.3	0.19		12.699	25.639	34.666	43.246	1
12	12.699	34.811	7.30	106.4	32.1	1.49	16.3	0.19		12.699	25.688	34.665	43.245	12
20	12.693	34.816	7.29	106.2	32.1	1.49	16.3	0.19		12.693	25.903	34.659	43.614	20
32	12.691	34.811	7.26	105.7	33.4	1.50	16.3	0.20		12.691	26.021	35.196	43.726	32
40	12.691	34.814	7.27	105.4	33.1	1.49	16.3	0.20		12.691	26.046	35.161	44.071	40
50	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.174	44.735	50
60	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.173	44.834	60
70	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.262	44.980	70
80	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.311	45.055	80
90	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.392	45.121	90
100	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.460	45.230	100
110	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.521	45.289	110
120	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.574	45.311	120
130	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.615	45.317	130
140	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.713	45.490	140
150	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.789	45.579	150
160	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.845	45.614	160
170	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.896	45.692	170
180	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.945	45.762	180
190	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	36.985	45.811	190
200	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	37.014	45.846	200
210	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	37.025	45.850	210
220	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	37.032	45.869	220
230	12.691	34.815	7.26	105.3	36.2	1.50	16.3	0.21		12.691	26.056	37.039	45.877	230

# MARATHON 2 STA. 86

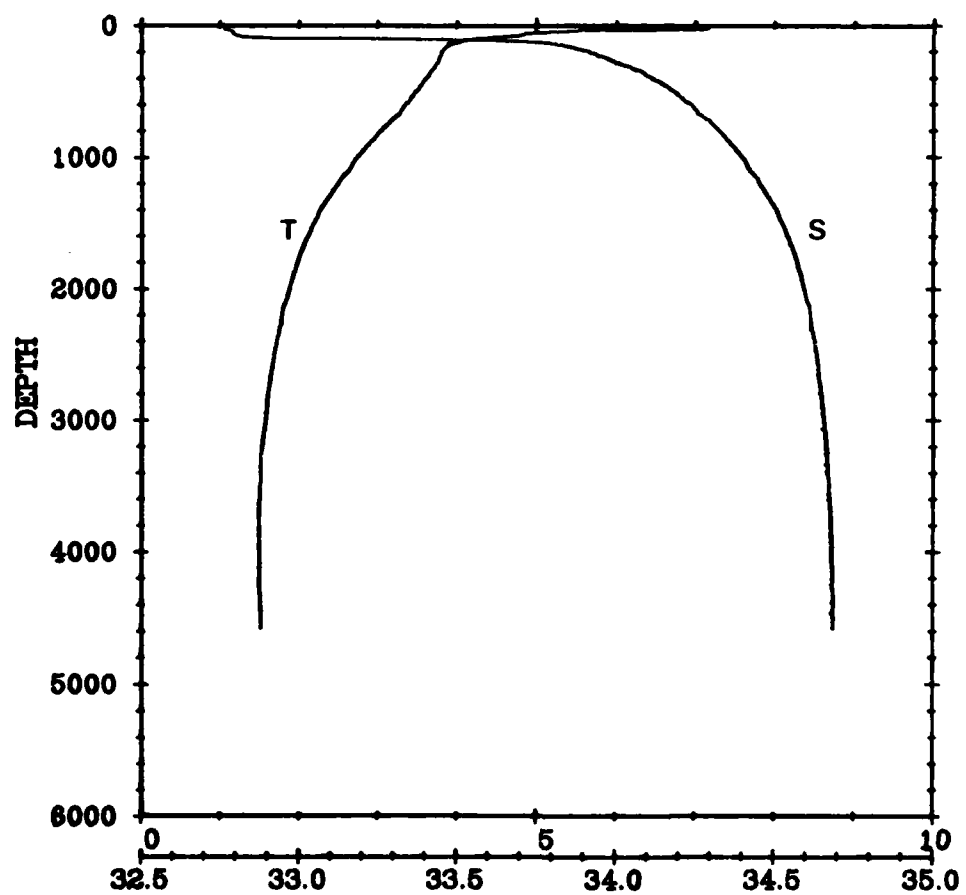
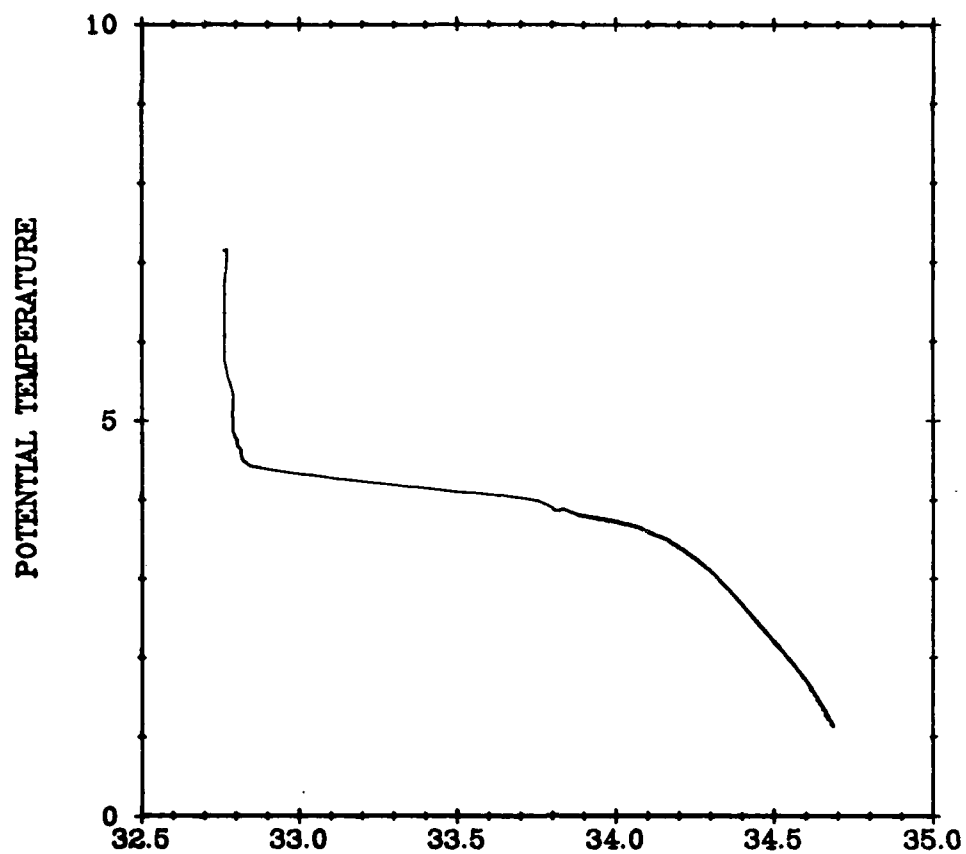


LATITUDE	LONGITUDE	MO-DY-YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
14 00 N	151 35 W	5-31-84	0942	4502	200	19	2	2	1110.9

## CTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 1	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C					CM/TON		M
0	1.160	32.768	1.160	25.640	34.609	43.183	231.442	1.000		0
20	1.161	32.770	1.161	25.635	34.629	43.228	232.111	1.041		19
40	1.162	32.773	1.162	25.631	34.644	43.265	232.798	1.081		39
60	1.163	32.773	1.163	25.627	34.659	43.295	233.461	1.124		59
80	1.164	32.774	1.164	25.624	34.674	43.329	234.128	1.166		79
100	1.165	32.775	1.165	25.620	34.689	43.358	234.798	1.213		99
120	1.166	32.776	1.166	25.617	34.704	43.389	235.461	1.259		119
140	1.167	32.777	1.167	25.614	34.719	43.420	236.128	1.306		139
160	1.168	32.778	1.168	25.611	34.734	43.451	236.798	1.351		159
180	1.169	32.779	1.169	25.608	34.749	43.482	237.461	1.397		179
200	1.170	32.780	1.170	25.605	34.764	43.513	238.128	1.443		199
220	1.171	32.781	1.171	25.602	34.779	43.544	238.798	1.489		219
240	1.172	32.782	1.172	25.599	34.794	43.575	239.461	1.535		239
260	1.173	32.783	1.173	25.596	34.809	43.606	240.128	1.581		259
280	1.174	32.784	1.174	25.593	34.824	43.637	240.798	1.627		279
300	1.175	32.785	1.175	25.590	34.839	43.668	241.461	1.673		299
320	1.176	32.786	1.176	25.587	34.854	43.699	242.128	1.719		319
340	1.177	32.787	1.177	25.584	34.869	43.730	242.798	1.765		339
360	1.178	32.788	1.178	25.581	34.884	43.761	243.461	1.811		359
380	1.179	32.789	1.179	25.578	34.899	43.792	244.128	1.857		379
400	1.180	32.790	1.180	25.575	34.914	43.823	244.798	1.903		399
420	1.181	32.791	1.181	25.572	34.929	43.854	245.461	1.949		419
440	1.182	32.792	1.182	25.569	34.944	43.885	246.128	1.995		439
460	1.183	32.793	1.183	25.566	34.959	43.916	246.798	2.041		459
480	1.184	32.794	1.184	25.563	34.974	43.947	247.461	2.087		479
500	1.185	32.795	1.185	25.560	34.989	43.978	248.128	2.133		499
520	1.186	32.796	1.186	25.557	35.004	44.009	248.798	2.179		519
540	1.187	32.797	1.187	25.554	35.019	44.040	249.461	2.225		539
560	1.188	32.798	1.188	25.551	35.034	44.071	250.128	2.271		559
580	1.189	32.799	1.189	25.548	35.049	44.102	250.798	2.317		579
600	1.190	32.800	1.190	25.545	35.064	44.133	251.461	2.363		599
620	1.191	32.801	1.191	25.542	35.079	44.164	252.128	2.409		619
640	1.192	32.802	1.192	25.539	35.094	44.195	252.798	2.455		639
660	1.193	32.803	1.193	25.536	35.109	44.226	253.461	2.501		659
680	1.194	32.804	1.194	25.533	35.124	44.257	254.128	2.547		679
700	1.195	32.805	1.195	25.530	35.139	44.288	254.798	2.593		699
720	1.196	32.806	1.196	25.527	35.154	44.319	255.461	2.639		719
740	1.197	32.807	1.197	25.524	35.169	44.350	256.128	2.685		739
760	1.198	32.808	1.198	25.521	35.184	44.381	256.798	2.731		759
780	1.199	32.809	1.199	25.518	35.199	44.412	257.461	2.777		779
800	1.200	32.810	1.200	25.515	35.214	44.443	258.128	2.823		799
820	1.201	32.811	1.201	25.512	35.229	44.474	258.798	2.869		819
840	1.202	32.812	1.202	25.509	35.244	44.505	259.461	2.915		839
860	1.203	32.813	1.203	25.506	35.259	44.536	260.128	2.961		859
880	1.204	32.814	1.204	25.503	35.274	44.567	260.798	3.007		879
900	1.205	32.815	1.205	25.500	35.289	44.598	261.461	3.053		899
920	1.206	32.816	1.206	25.497	35.304	44.629	262.128	3.099		919
940	1.207	32.817	1.207	25.494	35.319	44.660	262.798	3.145		939
960	1.208	32.818	1.208	25.491	35.334	44.691	263.461	3.191		959
980	1.209	32.819	1.209	25.488	35.349	44.722	264.128	3.237		979
1000	1.210	32.820	1.210	25.485	35.364	44.753	264.798	3.283		999
1020	1.211	32.821	1.211	25.482	35.379	44.784	265.461	3.329		1019
1040	1.212	32.822	1.212	25.479	35.394	44.815	266.128	3.375		1039
1060	1.213	32.823	1.213	25.476	35.409	44.846	266.798	3.421		1059
1080	1.214	32.824	1.214	25.473	35.424	44.877	267.461	3.467		1079
1100	1.215	32.825	1.215	25.470	35.439	44.908	268.128	3.513		1099
1120	1.216	32.826	1.216	25.467	35.454	44.939	268.798	3.559		1119
1140	1.217	32.827	1.217	25.464	35.469	44.970	269.461	3.605		1139
1160	1.218	32.828	1.218	25.461	35.484	45.001	270.128	3.651		1159
1180	1.219	32.829	1.219	25.458	35.499	45.032	270.798	3.697		1179
1200	1.220	32.830	1.220	25.455	35.514	45.063	271.461	3.743		1199
1220	1.221	32.831	1.221	25.452	35.529	45.094	272.128	3.789		1219
1240	1.222	32.832	1.222	25.449	35.544	45.125	272.798	3.835		1239
1260	1.223	32.833	1.223	25.446	35.559	45.156	273.461	3.881		1259
1280	1.224	32.834	1.224	25.443	35.574	45.187	274.128	3.927		1279
1300	1.225	32.835	1.225	25.440	35.589	45.218	274.798	3.973		1299
1320	1.226	32.836	1.226	25.437	35.604	45.249	275.461	4.019		1319
1340	1.227	32.837	1.227	25.434	35.619	45.280	276.128	4.065		1339
1360	1.228	32.838	1.228	25.431	35.634	45.311	276.798	4.111		1359
1380	1.229	32.839	1.229	25.428	35.649	45.342	277.461	4.157		1379
1400	1.230	32.840	1.230	25.425	35.664	45.373	278.128	4.203		1399
1420	1.231	32.841	1.231	25.422	35.679	45.404	278.798	4.249		1419
1440	1.232	32.842	1.232	25.419	35.694	45.435	279.461	4.295		1439
1460	1.233	32.843	1.233	25.416	35.709	45.466	280.128	4.341		1459
1480	1.234	32.844	1.234	25.413	35.724	45.497	280.798	4.387		1479
1500	1.235	32.845	1.235	25.410	35.739	45.528	281.461	4.433		1499
1520	1.236	32.846	1.236	25.407	35.754	45.559	282.128	4.479		1519
1540	1.237	32.847	1.237	25.404	35.769	45.590	282.798	4.525		1539
1560	1.238	32.848	1.238	25.401	35.784	45.621	283.461	4.571		1559
1580	1.239	32.849	1.239	25.398	35.799	45.652	284.128	4.617		1579
1600	1.240	32.850	1.240	25.395	35.814	45.683	284.798	4.663		1599
1620	1.241	32.851	1.241	25.392	35.829	45.714	285.461	4.709		1619
1640	1.242	32.852	1.242	25.389	35.844	45.745	286.128	4.755		1639
1660	1.243	32.853	1.243	25.386	35.859	45.776	286.798	4.801		1659
1680	1.244	32.854	1.244	25.383	35.874	45.807	287.461	4.847		1679
1700	1.245	32.855	1.245	25.380	35.889	45.838	288.128	4.893		1699
1720	1.246	32.856	1.246	25.377	35.904	45.869	288.798	4.939		1719
1740	1.247	32.857	1.247	25.374	35.919	45.900	289.461	4.985		1739
1760	1.248	32.858	1.248	25.371	35.934	45.931	290.128	5.031		1759
1780	1.249	32.859	1.249	25.368	35.949	45.962	290.798	5.077		1779
1800	1.250	32.860	1.250	25.365	35.964	45.993	291.461	5.123		1799
1820	1.251	32.861	1.251	25.362	35.979	46.024	292.128	5.169		1819
1840	1.252	32.862	1.252	25.359	35.994	46.055	292.798	5.215		1839
1860	1.253	32.863	1.253	25.356	36.009	46.086	293.461	5.261		1859
1880	1.254	32.864	1.254	25.353	36.024	46.117	294.128	5.307		1879
1900	1.255	32.865	1.255	25.350	36.039	46.148	294.798	5.353		1899
1920	1.256	32.866	1.256	25.347	36.054	46.179	295.461	5.399		1919
1940	1.257	32.867	1.257	25.344	36.069	46.210	296.128	5.445		1939
1960	1.258	32.868	1.258	25.341	36.084	46.241	296.798	5.491		1959
1980	1.259	32.869	1.259	25.338	36.099	46.272	297.461	5.537		1979
2000	1.260	32.870	1.260	25.335	36.114	46.303	298.128	5.583		1999
2020	1.261	32.871	1.261	25.332	36.129	46.334	298.798	5.629		2019
2040	1.262	32.872	1.262	25.329	36.144	46.365	299.461	5.675		2039
2060	1.263	32.873	1.263	25.326	36.159	46.396	300.128	5.721		2059
2080	1.264	32.874	1.264	25.323	36.174	46.427	300.798	5.767		2079
2100	1.265	32.875	1.265	25.320	36.189	46.458	301.461			

# MARATHON 2 STA. 87



LATITUDE	LONGITUDE	MO	DAY	YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
14 28.1N	160 57.9W	5	31	94	1950	4155	200	12	8.3	8.3	1018.5

DEPTH	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C						M
1	14.9	32.743	14.9	25.625	34.596	43.171	51.746	0.000	1
2	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	2
3	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	3
4	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	4
5	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	5
6	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	6
7	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	7
8	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	8
9	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	9
10	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	10
11	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	11
12	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	12
13	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	13
14	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	14
15	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	15
16	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	16
17	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	17
18	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	18
19	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	19
20	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	20
21	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	21
22	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	22
23	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	23
24	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	24
25	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	25
26	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	26
27	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	27
28	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	28
29	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	29
30	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	30
31	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	31
32	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	32
33	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	33
34	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	34
35	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	35
36	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	36
37	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	37
38	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	38
39	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	39
40	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	40
41	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	41
42	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	42
43	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	43
44	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	44
45	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	45
46	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	46
47	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	47
48	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	48
49	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	49
50	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	50
51	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	51
52	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	52
53	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	53
54	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	54
55	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	55
56	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	56
57	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	57
58	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	58
59	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	59
60	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	60
61	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	61
62	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	62
63	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	63
64	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	64
65	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	65
66	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	66
67	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	67
68	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	68
69	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	69
70	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	70
71	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	71
72	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	72
73	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	73
74	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	74
75	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	75
76	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	76
77	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	77
78	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	78
79	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	79
80	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	80
81	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	81
82	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	82
83	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	83
84	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	84
85	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	85
86	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	86
87	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	87
88	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	88
89	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	89
90	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	90
91	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	91
92	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	92
93	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	93
94	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	94
95	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	95
96	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	96
97	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	97
98	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	98
99	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	99
100	14.9	32.744	14.9	25.625	34.596	43.171	51.746	0.000	100

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBLN	DEG C				DB
1	17.174	32.755	7.17	105.0	29.2	1.42	15.9	0.21	7.174	25.627	34.596	43.170		1
43	14.973	32.786	7.38	102.5	29.8	1.51	17.1	0.16	4.969	25.924	35.000	43.673		48
2	14.749	32.815	7.10	100.9	31.9	1.58	18.3	0.18	4.743	25.972	35.059	43.743		72
122	13.89	33.317	4.11	56.2	55.3	2.30	31.5	0.06	4.182	26.445	35.552	44.255		102
151	13.705	33.809	2.53	20.8	82.2	2.92	42.2	0.01	3.895	26.849	35.964	44.674		152
195	13.814	33.891	0.95	12.9	90.6	3.06	44.2	0.01	3.801	26.924	36.042	44.755		196
243	13.778	33.962	0.61	8.3	99.4	3.12	45.2	0.01	3.761	26.984	36.104	44.818		250
293	13.742	34.014	0.56	7.6	102.8	3.13	45.2	0.01	3.722	27.030	36.150	44.865		301
339	13.623	34.102	0.51	6.9	115.6	3.10	45.0	0.01	3.596	27.112	36.238	44.958		402
496	13.473	34.190	0.46	6.2	125.1	3.09	44.8	0.00	3.439	27.189	36.322	45.048		500
593	13.320	34.241	0.46	6.2	132.2	3.09	44.9	0.00	3.280	27.253	36.393	45.126		598
589	13.189	34.293	0.43	5.8	140.0	3.09	44.9	0.00	3.143	27.300	36.447	45.196		695
732	13.753	34.322	0.41	5.8	143.2	3.11	44.8	0.00	3.001	27.344	36.497	45.243		789
838	12.939	34.363	0.39	5.8	150.0	3.11	44.7	0.00	2.939	27.391	36.553	45.306		890
1012	12.402	34.409	0.4	5.6	153.6	3.09	44.8	0.00	2.613	27.445	36.618	45.381		1022
1218	12.854	34.466	0.58	7.6	156.8	3.09	44.6	0.00	2.732	27.514	36.689	45.474		1157
1510	12.495	34.525	0.86	11.3	174.2	3.02	44.2	0.00	2.095	27.593	36.783	45.572		1517
1710	12.046	34.560	1.09	14.2	175.1	2.99	43.4	0.00	1.930	27.625	36.833	45.629		1751
2011	11.996	34.592	1.44	18.7	178.3	2.94	42.6	0.00	1.759	27.663	36.880	45.685		2137
2494	11.687	34.615	2.09	27.0	177.5	2.81	41.0	0.00	1.510	27.716	36.946	45.763		2529
2983	11.567	34.637	2.63	33.8	177.8	2.70	39.5	0.00	1.346	27.746	36.985	45.810		3029
3464	11.500	34.673	3.02	38.7	174.5	2.62	38.3	0.00	1.232	27.767	37.012	45.843		3521
3931	11.438	34.680	3.21	41.1	173.6	2.59	37.7	0.00	1.180	27.776	37.024	45.858		4001
4266	11.304	34.683	3.28	41.9	175.4	2.57	37.6	0.00	1.159	27.780	37.029	45.864		4244



NO-A109 930

PHYSICAL CHEMICAL AND CTD  
(CONDUCTIVITY/TEMPERATURE/DEPTH) DATA FROM THE... (U)  
OREGON STATE UNIV CORVALLIS COLL OF OCEANOGRAPHY

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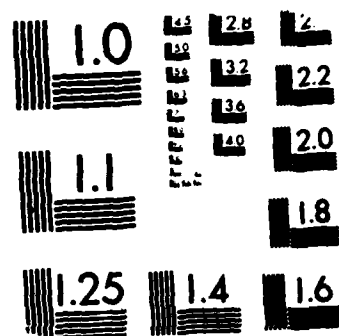
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F/G 8/8

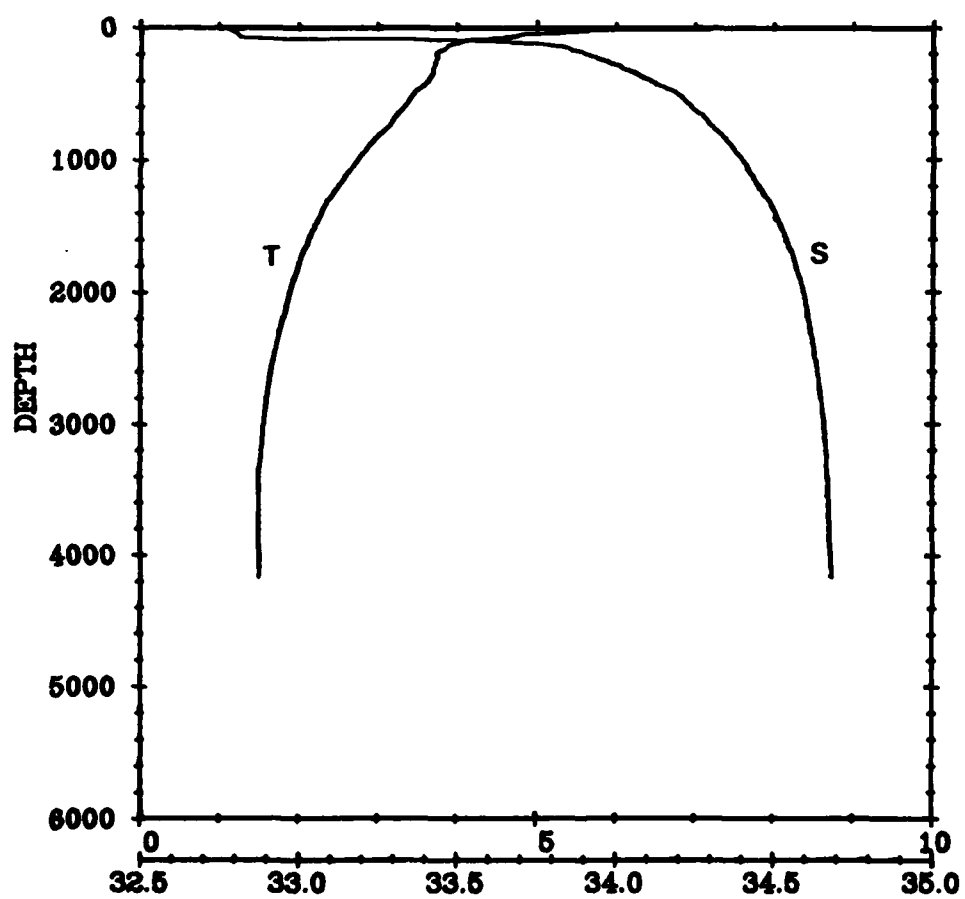
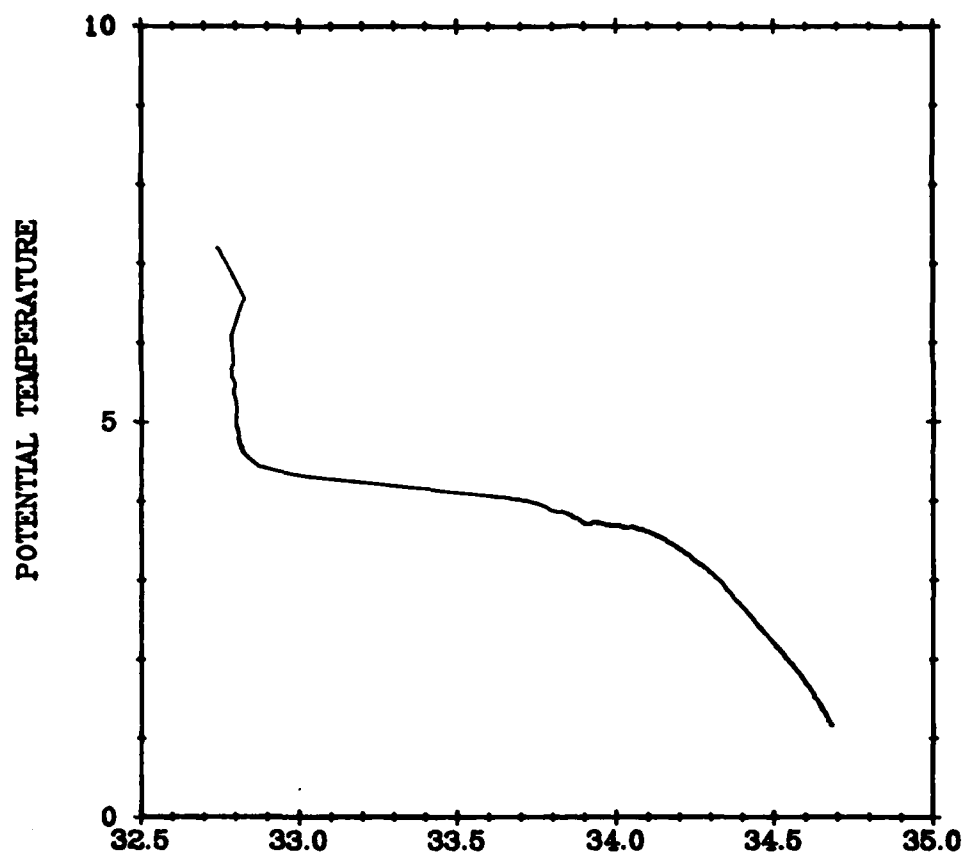
NL





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

# MARATHON 2 STA. 88

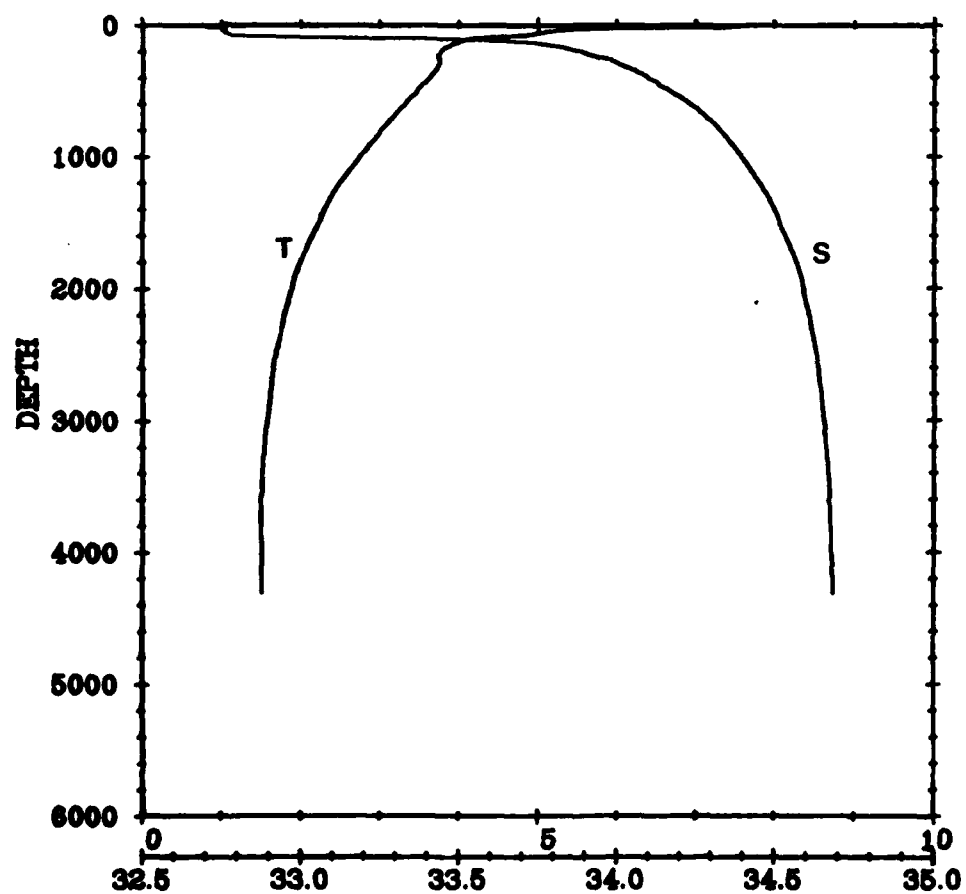
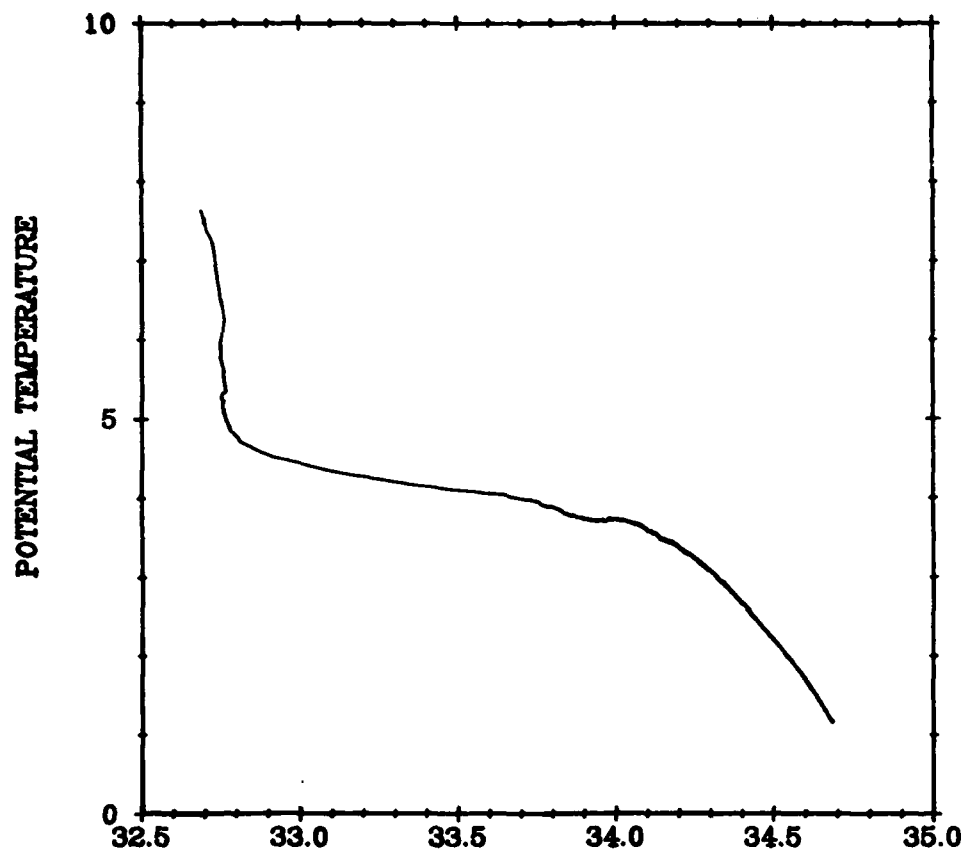


LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
54 40.2N	152 5 3W	5/11/84	2219	4316	20	2	12.2	10.6	1011.2

CTD DATA											
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH		
DB	DEG C		DEG C				CL/TON		M		
0	7.526	32.637	7.526	25.533	34.487	43.046	244.043	0.000	0		
20	6.832	32.727	6.830	25.651	34.637	43.226	233.090	0.048	19		
40	5.377	32.758	5.374	25.856	34.912	43.567	213.794	0.092	39		
60	5.040	32.764	5.036	25.899	34.972	43.643	209.865	0.135	59		
80	4.759	32.823	4.753	25.977	35.063	43.746	202.629	0.176	79		
100	4.284	33.216	4.277	26.339	35.444	44.144	168.350	0.213	99		
150	3.915	33.779	3.905	26.325	35.940	44.649	122.696	0.286	148		
200	3.771	33.881	3.758	26.920	36.041	44.756	113.991	0.345	198		
250	3.733	33.952	3.716	26.981	36.103	44.819	108.661	0.401	247		
300	3.746	34.008	3.726	27.025	36.145	44.850	104.971	0.454	297		
350	3.698	34.057	3.674	27.069	36.191	44.918	101.195	0.506	346		
400	3.633	34.095	3.606	27.106	36.231	44.951	98.065	0.555	396		
450	3.554	34.131	3.524	27.142	36.272	44.995	94.936	0.604	445		
500	3.475	34.167	3.441	27.179	36.312	45.038	91.798	0.650	495		
600	3.327	34.230	3.287	27.244	36.384	45.117	85.274	0.739	594		
700	3.172	34.282	3.125	27.301	36.448	45.189	81.464	0.823	693		
800	3.015	34.327	2.962	27.351	36.507	45.255	77.119	0.903	792		
900	2.889	34.362	2.830	27.391	36.553	45.307	73.804	0.978	890		
1000	2.758	34.394	2.692	27.429	36.598	45.358	70.623	1.050	989		
1100	2.637	34.423	2.565	27.463	36.639	45.405	67.736	1.119	1088		
1200	2.508	34.450	2.429	27.496	36.679	45.451	64.874	1.186	1186		
1300	2.391	34.477	2.306	27.528	36.717	45.495	62.105	1.249	1285		
1400	2.303	34.498	2.211	27.553	36.746	45.529	60.766	1.310	1383		
1500	2.235	34.514	2.136	27.571	36.769	45.556	58.591	1.370	1482		
1600	2.155	34.532	2.049	27.593	36.795	45.586	56.806	1.427	1580		
1700	2.078	34.549	1.965	27.613	36.819	45.614	55.101	1.483	1679		
1800	2.001	34.566	1.881	27.633	36.844	45.643	53.372	1.539	1777		
1900	1.937	34.580	1.810	27.650	36.865	45.667	51.988	1.590	1875		
2000	1.892	34.589	1.757	27.661	36.878	45.684	51.175	1.642	1974		
2100	1.853	34.598	1.711	27.672	36.892	45.699	50.417	1.693	2072		
2200	1.806	34.607	1.656	27.683	36.906	45.716	49.544	1.743	2170		
2300	1.770	34.615	1.612	27.693	36.918	45.730	48.863	1.792	2268		
2400	1.733	34.622	1.567	27.702	36.929	45.744	48.227	1.840	2366		
2500	1.695	34.630	1.520	27.712	36.941	45.758	47.491	1.888	2464		
2600	1.656	34.635	1.483	27.719	36.950	45.769	47.275	1.935	2562		
2700	1.642	34.640	1.450	27.725	36.958	45.779	46.711	1.982	2660		
2800	1.620	34.645	1.420	27.731	36.966	45.788	46.367	2.029	2758		
2900	1.601	34.649	1.392	27.735	36.973	45.796	46.125	2.075	2856		
3000	1.583	34.653	1.364	27.742	36.980	45.804	45.898	2.121	2954		
3100	1.561	34.657	1.333	27.747	36.987	45.813	45.585	2.167	3052		
3200	1.546	34.660	1.309	27.751	36.992	45.820	45.445	2.212	3149		
3300	1.531	34.664	1.284	27.756	36.998	45.827	45.226	2.258	3247		
3400	1.519	34.667	1.263	27.760	37.004	45.833	45.115	2.303	3345		
3500	1.512	34.670	1.246	27.763	37.008	45.839	45.073	2.348	3442		
3600	1.506	34.672	1.229	27.766	37.012	45.843	45.113	2.393	3540		
3700	1.504	34.674	1.217	27.769	37.015	45.847	45.209	2.438	3637		
3800	1.503	34.675	1.206	27.770	37.017	45.850	45.390	2.484	3735		
3900	1.504	34.677	1.196	27.772	37.020	45.853	45.530	2.529	3832		
4000	1.508	34.678	1.189	27.774	37.021	45.855	45.786	2.575	3930		
4100	1.510	34.680	1.180	27.775	37.024	45.858	45.940	2.621	4027		
4200	1.512	34.681	1.171	27.777	37.026	45.861	46.163	2.667	4124		
4300	1.514	34.682	1.161	27.779	37.028	45.863	46.385	2.713	4221		
4400	1.519	34.683	1.155	27.780	37.030	45.865	46.657	2.759	4319		
4500	1.519	34.683	1.155	27.780	37.030	45.865	46.657	2.759	4319		

NISKIN BOTTLE DATA											
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TURBIN	DEG C	
1	7.696	32.701	7.12	105.5	25.7	1.38	14.4	0.20	7.696	25.512	34.458
11	7.456	32.705	7.15	105.3	26.0	1.38	14.5	0.20	7.455	25.549	34.506
31	5.733	32.759	7.56	107.0	28.7	1.46	16.0	0.20	5.731	25.815	34.853
57	5.070	32.765	7.40	103.0	29.6	1.51	16.9	0.18	5.066	25.896	34.968
88	4.552	32.887	6.55	90.1	35.6	1.74	20.4	0.22	4.546	26.050	35.146
155	3.900	33.798D							3.889	26.841	35.957
195	3.773	33.875D							3.760	26.915	36.036
298	3.749	34.007	0.56	7.6	102.7	3.14	45.0	0.01	3.729	27.021	36.144
394	3.635	34.094	0.51	6.9	114.2	3.14	44.8	0.01	3.608	27.105	36.230
496	3.473	34.170	0.49	6.6	122.6	3.12	44.5	0.00	3.439	27.181	36.314
599	3.322	34.234	0.49	6.6	131.2	3.10	44.2	0.00	3.282	27.248	36.388
698	3.167	34.286	0.48	6.4	138.0	3.11	44.6	0.00	3.120	27.304	36.452
789	3.021	34.329	0.44	5.9	143.2	3.15	44.7	0.00	2.968	27.352	36.508
885	2.903	34.363	0.40	5.3	147.7	3.15	44.8	0.00	2.844	27.391	36.552
995	2.751	34.398	0.45	6.0	151.7	3.14	44.7	0.00	2.687	27.432	36.602
1228	2.458	34.466	0.59	7.8	163.8	3.11	44.6	0.00	2.377	27.513	36.698
1490	2.214	34.518	0.82	10.7	169.2	3.07	44.1	0.00	2.135	27.575	36.772
1747	2.028	34.564			172.0	3.01	43.4	0.00	1.910	27.629	36.838
1985	1.889	34.594	1.44	18.7	174.4	2.96	42.6	0.00	1.754	27.666	36.883
2467	1.693	34.633	2.06	26.6	176.3	2.84	41.0	0.00	1.519	27.714	36.944
2982	1.577	34.658	2.58	33.2	170.8	2.74	39.4	0.00	1.356	27.746	36.984
3481	1.512	34.672	2.98	38.2	171.4	2.66	38.4	0.00	1.242	27.765	37.010
3966	1.508	34.679	3.21	41.1	172.7	2.61	37.7	0.00	1.185	27.775	37.022
4318	1.519	34.684	3.28	41.9	172.7	2.59	37.6	0.00	1.156	27.781	37.030

# MARATHON 2 STA. 89

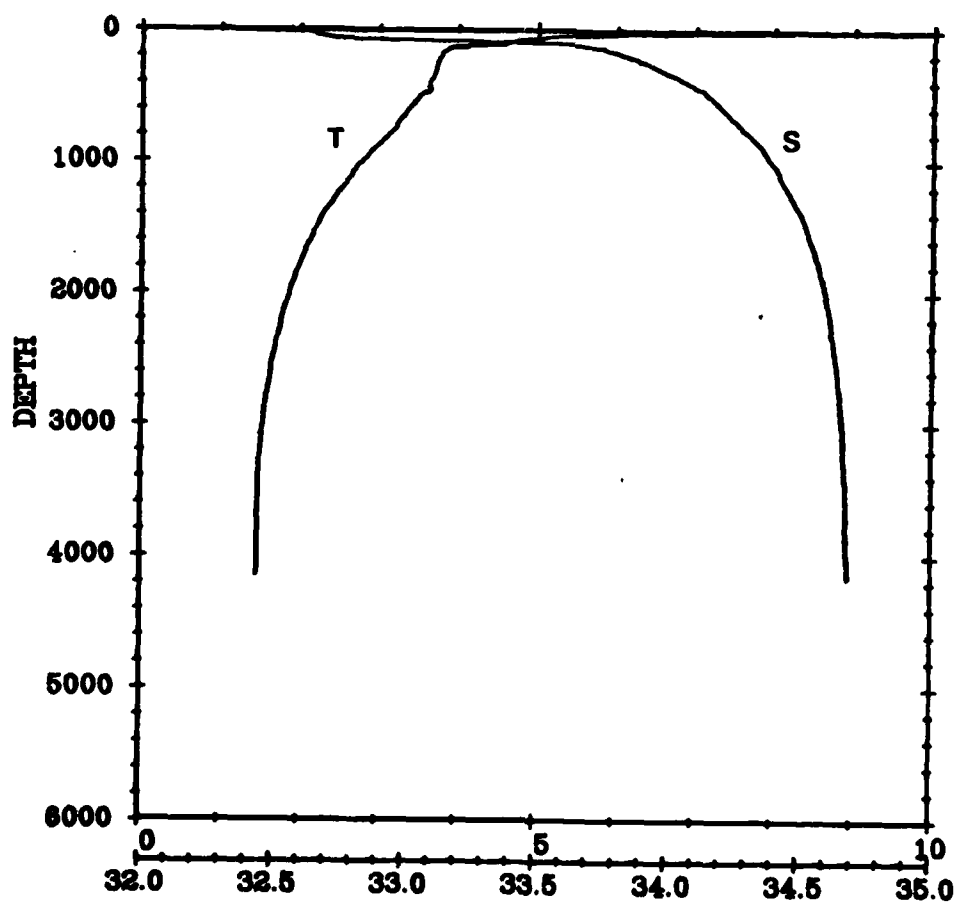
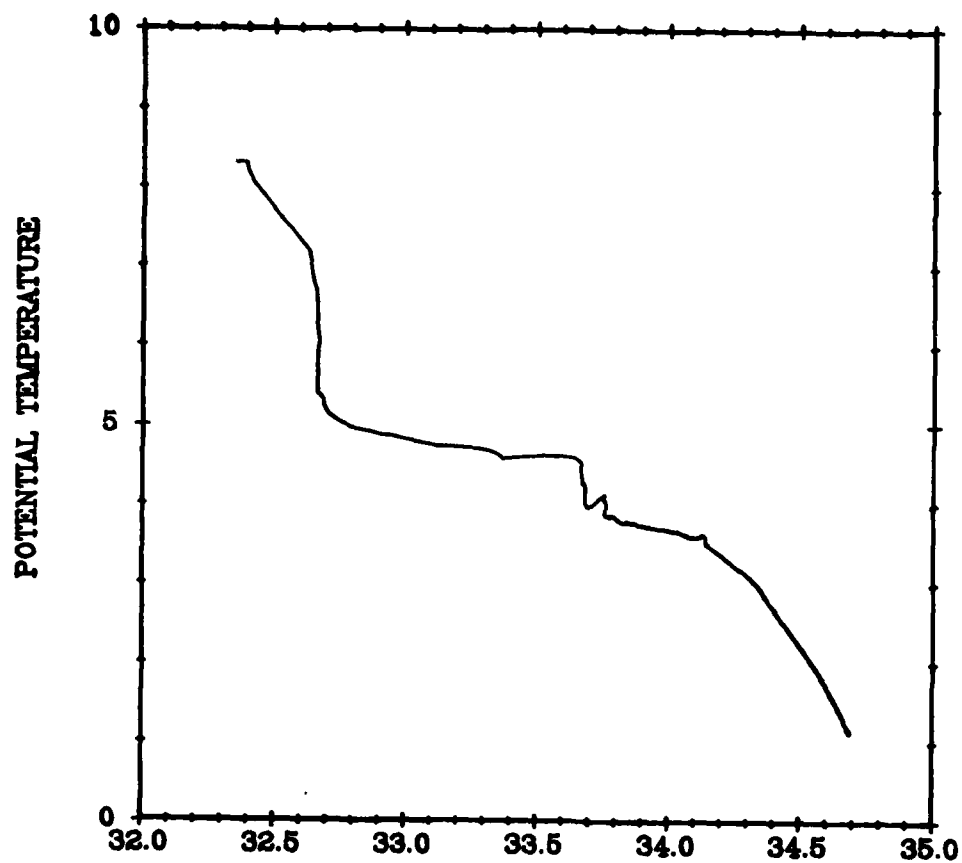


LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
54 57 4N	152 23 9W	6/ 1/84	518	4127	50	13	23	18	1013.5

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CM/CM	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	8.284	32.387	8.284	25.181	34.135	42.635	277.516	0.000	0
20	7.343	32.344	7.341	25.439	34.403	42.972	251.141	0.053	19
40	5.635	32.667	5.632	25.754	34.799	43.443	223.513	0.101	39
60	5.115	32.725	5.111	25.860	34.930	43.597	213.604	0.144	59
80	4.822	33.013	4.817	26.125	35.235	43.882	188.635	0.195	79
100	4.625	33.462	4.618	26.498	35.582	44.262	153.147	0.219	99
150	3.998	33.766	3.988	26.916	35.932	44.642	123.507	0.288	148
200	3.794	33.846	3.781	26.890	36.011	44.725	116.950	0.348	198
250	3.740	33.912	3.723	26.949	36.071	44.787	111.736	0.405	247
300	3.720	33.956	3.700	26.994	36.116	44.833	107.862	0.460	297
350	3.693	34.024	3.669	27.043	36.167	44.884	103.619	0.513	346
400	3.642	34.369	3.615	27.084	36.210	44.929	100.105	0.564	396
450	3.638	34.115	3.607	27.122	36.247	44.956	96.997	0.613	445
500	3.528	34.149	3.494	27.160	36.290	45.014	93.691	0.661	495
600	3.394	34.206	3.354	27.219	36.356	45.086	88.762	0.752	594
700	3.254	34.258	3.237	27.274	36.418	45.154	84.111	0.839	693
800	3.135	34.308	3.081	27.325	36.475	45.217	79.797	0.921	792
900	2.958	34.355	2.898	27.379	36.538	45.289	75.056	0.998	890
1000	2.798	34.389	2.732	27.421	36.588	45.346	71.496	1.071	989
1100	2.655	34.420	2.583	27.459	36.634	45.399	68.153	1.141	1088
1200	2.549	34.447	2.470	27.490	36.671	45.441	65.542	1.208	1186
1300	2.428	34.473	2.343	27.522	36.709	45.485	62.808	1.272	1285
1400	2.302	34.501	2.210	27.555	36.749	45.532	59.834	1.333	1383
1500	2.215	34.520	2.116	27.578	36.776	45.564	57.924	1.392	1482
1600	2.146	34.536	2.040	27.597	36.799	45.591	56.410	1.450	1580
1700	2.065	34.554	1.952	27.618	36.825	45.621	54.595	1.505	1679
1800	1.998	34.568	1.878	27.635	36.846	45.645	53.190	1.559	1777
1900	1.936	34.581	1.809	27.651	36.865	45.668	51.903	1.611	1875
2000	1.877	34.594	1.743	27.667	36.884	45.690	50.629	1.663	1974
2100	1.835	34.602	1.693	27.677	36.897	45.706	49.905	1.713	2072
2200	1.796	34.613	1.636	27.690	36.913	45.724	48.859	1.762	2170
2300	1.757	34.619	1.599	27.697	36.923	45.736	48.409	1.811	2268
2400	1.714	34.627	1.548	27.707	36.936	45.751	47.622	1.859	2366
2500	1.680	34.633	1.526	27.715	36.946	45.763	47.080	1.906	2464
2600	1.649	34.640	1.466	27.724	36.956	45.776	46.490	1.953	2562
2700	1.629	34.644	1.438	27.729	36.963	45.784	46.251	2.000	2660
2800	1.594	34.650	1.394	27.737	36.974	45.797	45.656	2.045	2758
2900	1.567	34.655	1.358	27.744	36.982	45.807	45.228	2.091	2856
3000	1.552	34.659	1.334	27.748	36.988	45.814	45.026	2.136	2954
3100	1.531	34.663	1.304	27.754	36.995	45.821	44.733	2.181	3052
3200	1.519	34.665	1.282	27.757	36.999	45.828	44.702	2.226	3149
3300	1.504	34.667	1.258	27.760	37.004	45.834	44.621	2.270	3247
3400	1.485	34.670	1.239	27.764	37.012	45.840	44.550	2.315	3345
3500	1.492	34.672	1.226	27.766	37.012	45.844	44.633	2.359	3442
3600	1.487	34.675	1.211	27.770	37.016	45.849	44.613	2.404	3540
3700	1.484	34.677	1.198	27.772	37.019	45.853	44.692	2.449	3637
3800	1.484	34.678	1.187	27.774	37.022	45.855	44.394	2.494	3735
3900	1.490	34.678	1.182	27.774	37.022	45.856	45.240	2.539	3832
4000	1.491	34.680	1.172	27.777	37.025	45.859	45.175	2.584	3930
4100	1.487	34.682	1.157	27.779	37.029	45.864	45.430	2.629	4027
4200	1.479	34.685	1.139	27.783	37.033	45.869	45.346	2.675	4124
4228	1.473	34.685	1.130	27.784	37.034	45.871	45.319	2.687	4151

NISKIN BOTTLE DATA		DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
DEPTH	TEMP												
M	DEG C	ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
11	8.244	32.476	7.34	109.9	10.3	0.80	3.6	0.06	8.244	25.257	34.191	42.711	1
11	7.974	32.531	7.34	109.3	14.9	0.93	6.2	0.08	7.973	25.339	34.275	42.917	11
31	5.970	32.671	7.62	108.4	23.1	1.24	12.2	0.16	5.967	25.717	34.745	43.373	31
56	4.875	32.797	6.82	94.5	29.4	1.56	17.3	0.22	4.869	25.943	35.324	43.702	76
97	4.287	33.283	4.35	59.6	53.1	2.25	30.0	0.05	4.290	26.392	35.495	44.194	97
130	3.972	33.692	2.25	30.7	73.2	2.79	39.6	0.01	3.963	26.750	35.863	44.571	130
192	3.762	33.870	1.15	15.6	90.5	3.03	43.9	0.00	3.749	26.912	36.034	44.750	193
261	3.727	33.943	0.78	10.6	99.4	3.13	44.8	0.00	3.709	26.974	36.097	44.813	263
345	3.684	34.027	0.63	8.5	105.6	3.15	45.1	0.00	3.661	27.046	36.170	44.887	347
423	3.605	34.098	0.56	7.6	116.4	3.16	44.7	0.00	3.576	27.111	36.238	44.958	426
598	3.315	34.227	0.48	6.5	129.1	3.14	45.0	0.00	3.295	27.241	36.380	45.113	603
690	3.259	34.266	0.43	5.8	138.1	3.15	45.2	0.00	3.212	27.280	36.423	45.159	696
794	3.124	34.320	0.36	4.9	144.1	3.18	45.4	0.00	3.050	27.338	36.489	45.232	801
888	2.966	34.349	0.41	5.5	149.1	3.17	45.3	0.00	2.906	27.374	36.532	45.282	897
1007	2.796	34.391	0.42	5.6	154.3	3.17	45.4	0.00	2.719	27.424	36.592	45.351	1017
1217	2.489	34.458	0.54	7.1	165.1	3.15	45.0	0.00	2.407	27.504	36.688	45.461	1250
1535	2.175	34.529	0.86	11.2	174.3	3.09	44.5	0.00	2.073	27.588	36.789	45.579	1553
1742	2.002	34.567	1.20	15.6	176.7	3.04	43.8	0.00	1.885	27.634	36.844	45.643	1763
2002	1.873	34.596	1.49	19.3	177.1	2.98	42.9	0.00	1.736	27.668	36.886	45.693	2028
2473	1.681	34.633	2.10	27.1	176.9	2.87	41.3	0.00	1.506	27.715	36.945	45.763	2508
2961	1.550	34.659	2.66	34.2	175.5	2.75	39.6	0.00	1.332	27.749	36.988	45.814	3006
3471	1.498	34.673	3.06	39.2	171.3	2.66	38.6	0.00	1.220	27.768	37.013	45.845	3529
3996	1.490	34.691	3.21	41.1	171.3	2.63	38.1	0.00	1.176	27.777	37.025	45.860	3965
4151	1.472	34.685	3.40	43.5	168.9	2.60	37.4	0.00	1.129	27.783	37.034	45.871	4227

# MARATHON 2 STA. 90



LATITUDE	LONGITUDE	MO/DY/YR	START TIME GMT	BOTTOM M	WIND DIR	SPEED KT	AIR TEMP DEG C	WET BULB DEG C	BAROM MB
55 13 9N	152 31 5W	5/ 1/84	1218	4451	70	8	8.9	7.8	1016.5

## CTD DATA

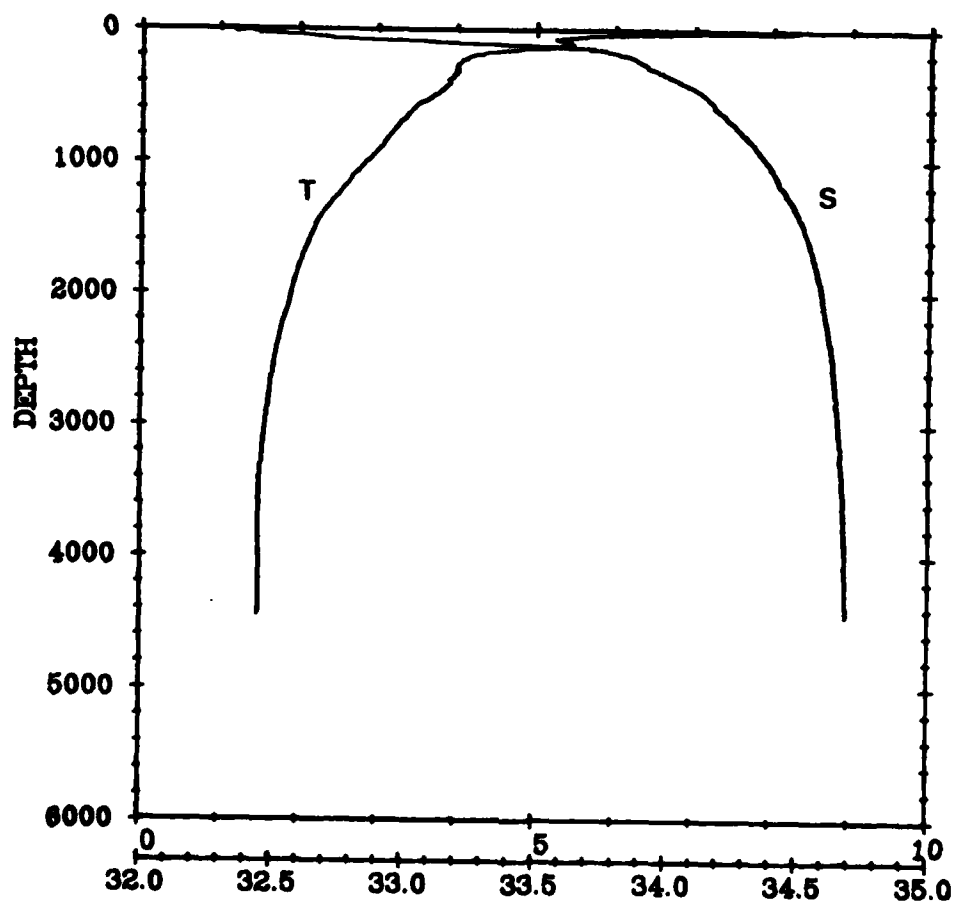
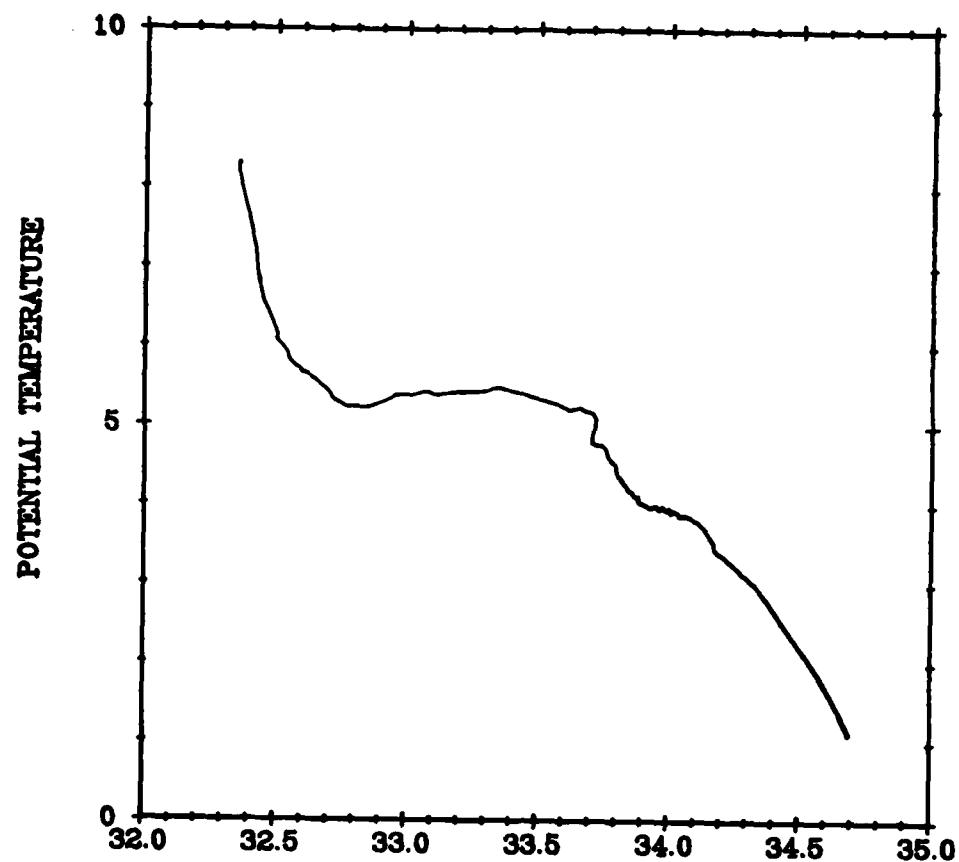
PRESS DB	TEMP DEG C	SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA ML/TON	DYNAMIC HT	DEPTH M
0	8.108	32.157	8.108	25.154	34.077	42.607	280.110	0.000	0
20	7.597	32.194	7.595	25.286	34.241	42.850	267.927	0.355	19
40	6.129	32.513	6.125	25.576	34.600	43.223	240.407	0.106	39
60	5.479	32.677	5.474	25.780	34.831	43.484	221.207	0.152	59
80	5.298	32.860	5.292	25.946	35.008	43.662	205.646	0.194	79
100	5.113	33.142	5.105	26.156	35.205	43.853	185.964	0.234	99
120	4.942	33.713	4.931	26.463	35.727	44.388	138.385	0.315	148
140	4.223	33.944	4.209	26.845	35.943	44.637	121.318	0.380	198
160	4.018	33.897	4.021	26.907	36.014	44.716	115.874	0.439	247
180	3.995	33.939	3.974	26.945	36.054	44.757	112.690	0.496	297
200	3.967	33.999	3.943	26.996	36.105	44.810	108.312	0.551	347
220	3.891	34.043	3.863	27.044	36.156	44.864	104.179	0.604	396
240	3.835	34.100	3.804	27.090	36.205	44.915	100.115	0.656	445
260	3.730	34.139	3.695	27.132	36.252	44.966	96.545	0.705	495
280	3.456	34.184	3.415	27.195	36.329	45.057	91.753	0.749	544
300	3.312	34.241	3.265	27.255	36.396	45.110	85.989	0.827	593
320	3.164	34.289	3.110	27.307	36.456	45.197	81.520	0.871	642
340	3.040	34.337	2.980	27.358	36.512	45.259	77.271	0.910	690
360	2.915	34.375	2.808	27.403	36.567	45.321	73.289	0.951	739
380	2.717	34.408	2.644	27.444	36.615	45.379	69.713	0.997	788
400	2.589	34.436	2.510	27.478	36.657	45.425	66.794	1.045	836
420	2.447	34.467	2.351	27.515	36.701	45.477	63.461	1.100	885
440	2.308	34.498	2.215	27.552	36.746	45.528	60.122	1.152	933
460	2.209	34.521	2.110	27.579	36.778	45.566	57.782	1.451	1482
480	2.137	34.538	2.031	27.599	36.802	45.594	56.100	1.509	1580
500	2.067	34.553	1.954	27.617	36.824	45.620	54.582	1.564	1679
520	2.009	34.566	1.889	27.633	36.843	45.642	53.455	1.613	1777
540	1.956	34.578	1.829	27.647	36.860	45.662	52.360	1.670	1875
560	1.909	34.588	1.774	27.659	36.875	45.680	51.453	1.722	1974
580	1.872	34.596	1.729	27.669	36.888	45.694	50.795	1.774	2072
600	1.826	34.606	1.675	27.681	36.902	45.712	49.864	1.824	2170
620	1.780	34.614	1.622	27.691	36.915	45.728	49.062	1.873	2268
640	1.739	34.622	1.573	27.702	36.928	45.743	48.304	1.922	2366
660	1.712	34.630	1.527	27.711	36.941	45.757	47.582	1.970	2464
680	1.676	34.635	1.491	27.718	36.949	45.767	47.205	2.017	2562
700	1.651	34.640	1.459	27.724	36.957	45.777	46.813	2.064	2660
720	1.632	34.644	1.431	27.729	36.964	45.785	46.601	2.111	2758
740	1.609	34.649	1.399	27.736	36.972	45.795	46.234	2.157	2856
760	1.593	34.653	1.374	27.741	36.979	45.803	45.927	2.204	2954
780	1.570	34.657	1.342	27.745	36.985	45.811	45.712	2.249	3051
800	1.550	34.661	1.313	27.752	36.992	45.820	45.431	2.295	3149
820	1.535	34.665	1.288	27.756	36.999	45.827	45.212	2.340	3247
840	1.523	34.668	1.266	27.760	37.004	45.833	45.103	2.386	3344
860	1.511	34.672	1.245	27.764	37.008	45.839	45.050	2.431	3442
880	1.508	34.673	1.231	27.767	37.012	45.844	45.011	2.476	3540
900	1.502	34.675	1.215	27.770	37.016	45.849	45.109	2.521	3637
920	1.502	34.676	1.205	27.771	37.019	45.851	45.304	2.566	3734
940	1.504	34.679	1.196	27.773	37.021	45.854	45.459	2.611	3832
960	1.505	34.679	1.186	27.775	37.022	45.856	45.668	2.657	3929
980	1.507	34.680	1.177	27.776	37.025	45.859	45.891	2.703	4027
1000	1.510	34.681	1.169	27.778	37.026	45.861	46.110	2.749	4124
1020	1.514	34.682	1.161	27.779	37.028	45.863	46.385	2.795	4221
1040	1.515	34.684	1.151	27.781	37.031	45.866	46.520	2.841	4318
1060	1.498	34.687	1.123	27.786	37.037	45.874	46.281	2.888	4415
1080	1.494	34.688	1.115	27.787	37.038	45.876	46.224	2.903	4447

## WATSKIN BOTTLE DATA

DEPTH M	TEMP DEG C	SALINITY	DIST O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUSIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
1	8.276	32.364	7.20	107.8	11.1	0.85	4.6	0.10	8.276	25.164	34.088	42.619	1	
45	6.122	32.523	6.97	98.0	19.2	1.20	11.3	0.29	6.118	25.581	34.604	43.228	45	
99	5.438	33.195	4.72	66.5	40.7	1.92	25.4	0.32	5.430	26.195	35.242	43.887	99	
129	5.297	33.542	3.57	50.2	51.0	2.23	31.0	0.32	5.287	26.487	35.535	44.182	129	
163	4.654	33.766	2.43	33.7	66.8	2.59	37.0	0.31	4.642	26.737	35.814	44.488	164	
177	4.316	33.826	1.92	26.4	76.0	2.77	39.8	0.31	4.302	26.921	35.915	44.604	198	
247	4.090	33.885	1.39	19.0	85.0	2.92	42.2	0.31	4.073	26.992	35.996	44.696	249	
297	4.000	33.941	1.02	13.9	91.5	3.00	43.4	0.31	3.979	26.946	36.054	44.758	299	
395	3.878	34.047	0.71	9.7	103.3	3.06	44.2	0.30	3.850	27.043	36.157	44.865	398	
494	3.729	34.145	0.53	7.2	115.7	3.09	44.5	0.30	3.695	27.137	36.257	44.971	499	
593	3.428	34.198	0.49	6.6	126.7	3.11	44.7	0.30	3.388	27.209	36.344	45.073	598	
691	3.271	34.257	0.46	6.2	135.8	3.13	44.7	0.30	3.224	27.271	36.414	45.150	697	
789	3.139	34.302	0.42	5.6	140.7	3.13	44.9	0.30	3.086	27.320	36.469	45.211	796	
887	3.046	34.336	0.39	5.2	145.0	3.14	44.9	0.30	2.987	27.356	36.510	45.257	884	
994	2.844	34.384	0.41	5.5	152.4	3.14	45.1	0.30	2.777	27.413	36.578	45.314	1004	
1218	2.521	34.455	0.55	7.3	163.1	3.12	44.9	0.30	2.439	27.499	36.691	45.453	1251	
1487	2.218	34.521	0.92	10.7	172.8	3.06	44.3	0.30	2.119	27.578	36.775	45.564	1504	
1726	2.335	34.363	1.13	14.7	177.1	3.02	43.5	0.30	1.919	27.628	36.836	45.634	1747	
1994	1.879	34.596	1.48	19.2	177.4	2.96	42.9	0.30	1.742	27.668	36.886	45.691	2020	
2555	1.686	34.635	2.08	25.8	177.3	2.93	41.1	0.30	1.507	27.717	36.947	45.764	2551	
2998	1.575	34.657	2.51	33.5	175.2	2.74	39.6	0.30	1.354	27.745	36.984	45.809	3044	
3493	1.515	34.673	3.01	38.6	172.6	2.66	38.4	0.30	1.235	27.767	37.011	45.843	3551	
3937	1.524	34.680	3.19	40.8	170.0	2.61	38.0	0.30	1.182	27.776	37.024	45.857	4028	
4446	1.494	34.688	3.46	44.2	167.8	2.55	37.1	0.30	1.116	27.787	37.038	45.875	4531	



# MARATHON 2 STA. 91



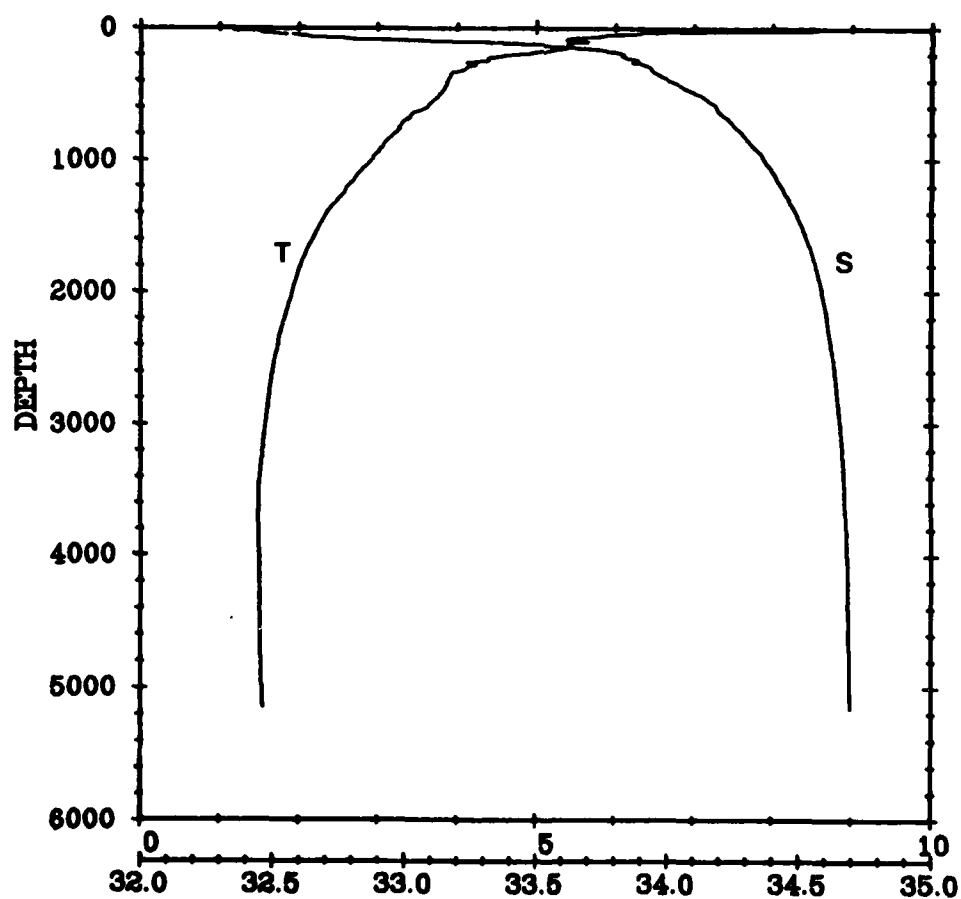
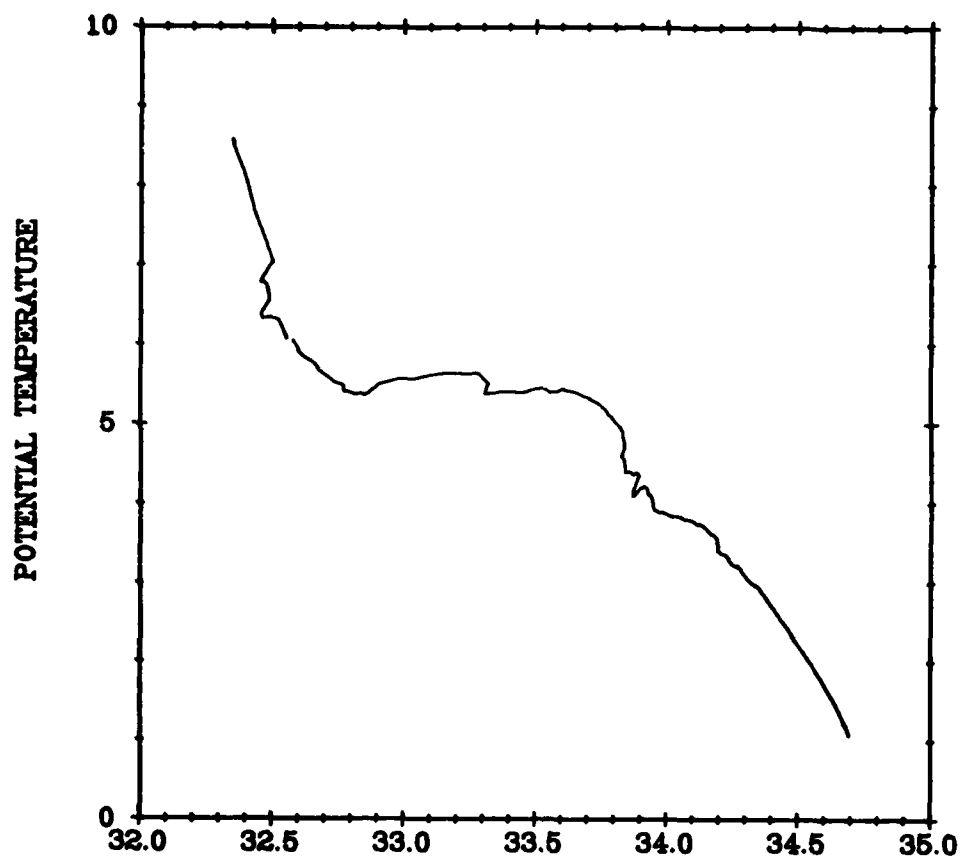
## R/V THOMAS WASHINGTON MARATHON LEG II STATION 92

LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
55 25.6N 152 38.1W 6/ 1/84 1900 5155 150 5 11.1 8.9 1019.3

CTD DATA										
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH	
DB	DEG C		DEG C				CL/TON		M	
0	8.569	32.351	8.569	25.110	34.022	42.541	284.255	0.000	0	
20	7.805	32.408	7.803	25.267	34.213	42.763	269.657	0.055	19	
40	6.328	32.506	6.325	25.542	34.556	43.171	243.680	0.107	39	
60	5.829	32.630	5.824	25.702	34.738	43.374	228.714	0.154	59	
80	5.471	32.791	5.465	25.872	34.923	43.573	212.755	0.198	79	
100	5.590	33.125	5.582	26.122	35.162	43.802	189.255	0.238	99	
150	5.391	33.641	5.379	26.554	35.597	44.238	148.835	0.323	148	
200	4.844	33.829	4.829	26.766	35.833	44.498	129.107	0.392	198	
250	4.367	33.885	4.349	26.863	35.953	44.640	120.213	0.455	247	
300	4.140	33.932	4.119	26.924	36.026	44.723	114.727	0.513	297	
350	3.927	33.962	3.903	26.970	36.083	44.789	110.668	0.570	347	
400	3.883	34.006	3.855	27.010	36.124	44.833	107.314	0.624	396	
450	3.851	34.057	3.820	27.054	36.170	44.879	103.560	0.677	446	
500	3.787	34.109	3.752	27.103	36.220	44.932	99.390	0.728	495	
600	3.621	34.185	3.580	27.180	36.305	45.025	92.721	0.824	594	
700	3.363	34.233	3.315	27.244	36.382	45.114	87.126	0.914	693	
800	3.221	34.283	3.167	27.297	36.443	45.181	82.574	0.999	792	
900	3.058	34.324	2.997	27.346	36.500	45.246	78.431	1.079	890	
1000	2.927	34.367	2.860	27.392	36.553	45.305	74.445	1.155	989	
1100	2.767	34.401	2.694	27.434	36.603	45.363	70.776	1.228	1088	
1200	2.630	34.430	2.550	27.470	36.646	45.413	67.687	1.297	1186	
1300	2.503	34.459	2.417	27.504	36.688	45.461	64.671	1.363	1285	
1400	2.364	34.488	2.271	27.540	36.730	45.510	61.484	1.427	1383	
1500	2.270	34.509	2.171	27.565	36.760	45.545	59.354	1.487	1482	
1600	2.185	34.528	2.079	27.587	36.788	45.577	57.443	1.545	1580	
1700	2.098	34.547	1.985	27.610	36.815	45.609	55.481	1.602	1679	
1800	2.027	34.562	1.907	27.628	36.838	45.635	53.970	1.657	1777	
1900	1.971	34.574	1.843	27.643	36.855	45.656	52.831	1.710	1875	
2000	1.919	34.585	1.784	27.656	36.872	45.676	51.793	1.762	1974	
2100	1.871	34.595	1.728	27.668	36.887	45.693	50.855	1.814	2072	
2200	1.824	34.605	1.673	27.680	36.902	45.711	49.912	1.864	2170	
2300	1.782	34.613	1.624	27.691	36.915	45.727	49.160	1.914	2268	
2400	1.745	34.621	1.578	27.700	36.927	45.741	48.454	1.962	2366	
2500	1.709	34.629	1.534	27.710	36.939	45.755	47.745	2.010	2464	
2600	1.675	34.635	1.492	27.718	36.949	45.767	47.194	2.058	2562	
2700	1.654	34.639	1.462	27.723	36.956	45.774	46.945	2.105	2660	
2800	1.632	34.644	1.431	27.729	36.964	45.785	46.601	2.152	2758	
2900	1.610	34.649	1.400	27.736	36.972	45.795	46.248	2.198	2856	
3000	1.587	34.654	1.368	27.742	36.980	45.804	45.871	2.244	2954	
3100	1.563	34.658	1.335	27.748	36.987	45.813	45.542	2.290	3051	
3200	1.545	34.662	1.308	27.753	36.994	45.821	45.288	2.335	3149	
3300	1.529	34.665	1.282	27.757	36.999	45.828	45.125	2.381	3247	
3400	1.514	34.669	1.258	27.762	37.006	45.836	44.899	2.426	3344	
3500	1.505	34.671	1.239	27.765	37.010	45.841	44.898	2.470	3442	
3600	1.500	34.673	1.224	27.767	37.013	45.845	44.951	2.515	3540	
3700	1.495	34.676	1.208	27.771	37.017	45.850	44.930	2.560	3637	
3800	1.493	34.677	1.196	27.772	37.020	45.853	45.094	2.605	3735	
3900	1.492	34.679	1.184	27.775	37.023	45.857	45.200	2.650	3832	
4000	1.494	34.680	1.175	27.776	37.025	45.859	45.423	2.696	3929	
4100	1.496	34.682	1.166	27.779	37.027	45.862	45.574	2.741	4027	
4200	1.498	34.683	1.157	27.780	37.029	45.865	45.795	2.787	4124	
4300	1.500	34.684	1.148	27.781	37.031	45.867	46.015	2.833	4221	
4400	1.504	34.685	1.140	27.783	37.033	45.869	46.267	2.879	4318	
4500	1.506	34.686	1.131	27.784	37.035	45.872	46.485	2.925	4415	
4600	1.508	34.687	1.121	27.786	37.037	45.874	46.703	2.972	4513	
4700	1.513	34.688	1.114	27.787	37.039	45.876	46.970	3.019	4610	
4800	1.515	34.689	1.104	27.788	37.041	45.879	47.187	3.066	4707	
4900	1.519	34.689	1.096	27.789	37.042	45.880	47.506	3.113	4804	
5000	1.523	34.690	1.088	27.790	37.043	45.892	47.756	3.161	4901	
5100	1.528	34.691	1.080	27.792	37.045	45.894	48.024	3.209	4998	
5200	1.536	34.692	1.076	27.793	37.047	45.896	48.345	3.257	5094	
5244	1.540	34.693	1.074	27.794	37.048	45.897	48.459	3.278	5137	

NISKIN BOTTLE DATA											
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C	
1	8.691	32.363	7.52	113.7	5.3	0.69	2.6	0.12	8.691	25.101	34.007
52	5.907	32.597	6.65	94.4	21.2	1.34	11.4	0.26	5.913	25.666	34.699
171	5.628	33.291	5.24	74.1	34.3	1.78	21.9	0.22	5.620	26.019	35.259
147	5.406	33.619	3.20	45.2	54.0		31.9	0.01	5.394	26.535	35.577
197	4.915	33.927	2.46	34.4	65.2		36.2	0.01	4.910	26.754	35.917
247	4.399	33.867	1.79	24.7	77.4		39.7	0.01	4.381	26.945	36.334
294	4.138	33.924	1.47	20.2	93.0	2.88	41.7	0.01	4.177	26.912	36.213
390	3.904	33.996	0.81	11.3	99.1	3.06	44.0	0.00	3.877	27.000	36.111
495	3.792	34.103	0.58	7.9	109.7	3.08	44.3	0.00	3.757	27.037	36.215
590	3.643	34.179	0.44	6.0	119.6	3.11	44.7	0.00	3.602	27.173	36.297
691	3.394	34.224	0.48	6.5	130.0	3.10	44.7	0.00	3.346	27.233	36.370
787	3.251	34.282	0.41	5.5	137.7	3.11	44.9	0.00	3.197	27.294	36.438
888	3.058	34.329	0.43	5.7	144.1	3.14	44.8	0.00	2.998	27.350	36.503
980	2.946	34.364	0.38	5.1	149.3	3.15	44.9	0.00	2.890	27.388	36.548
1228	2.584	34.443	0.49	6.5	162.1	3.13	45.0	0.00	2.502	27.484	36.663
1524	2.276	34.509	0.76	10.0	169.9	3.09	44.4	0.00	2.173	27.564	36.760
1743	2.067	34.556	1.06	13.8	174.2	3.03	43.7	0.00	1.949	27.620	36.827
1988	1.924	34.586	1.40	18.2	175.7	2.97	43.0	0.00	1.788	27.656	36.872
2513	1.690	34.634	2.09	27.0	179.6	2.85	41.0	0.00	1.511	27.716	36.945
2996	1.580	34.656	2.59	33.3	174.6	2.74	39.6	0.00	1.358	27.744	36.983
3496	1.508	34.673	3.01	38.6	172.9	2.64	38.4	0.00	1.236	27.766	37.011
3978	1.495	34.681	3.25	41.6	170.4	2.61	37.8	0.00	1.171	27.777	37.026
4427	1.505	34.685	3.41	43.6	166.8	2.57	37.3	0.00	1.129	27.783	37.034
5136	1.540	34.691	3.63	46.3	160.0	2.52	36.5	0.00	1.075	27.792	37.046

# MARATHON 2 STA. 92

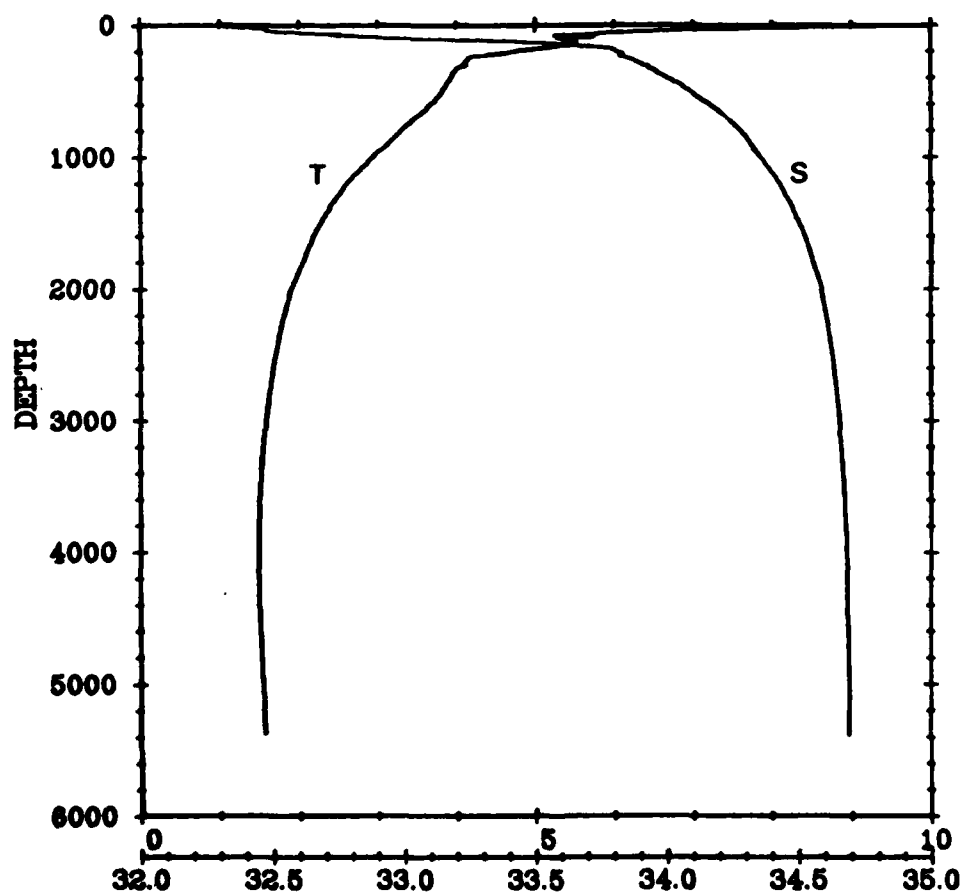
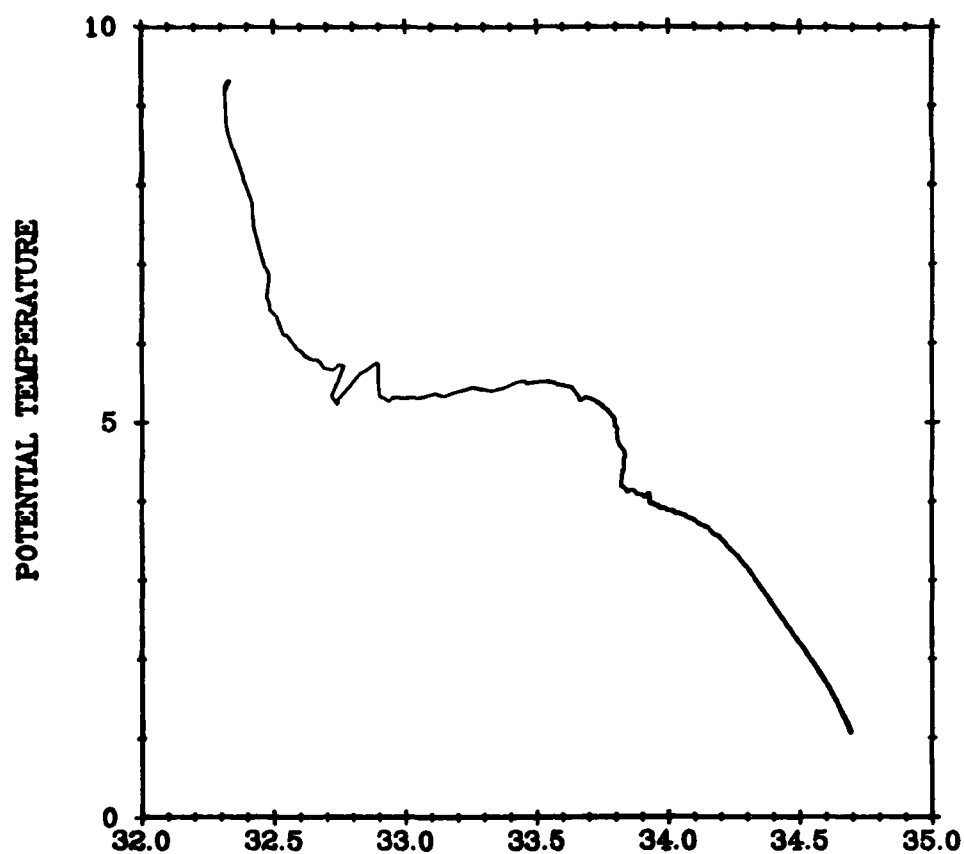


LATITUDE	LONGITUDE	MO/OY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
55 35.9N	152 46.3W	6/ 2/84	154	5377	130	4	14.4	10.6	1019.3

CTD DATA		SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
PRESS DB	TEMP DEG C								
0	9.123	32.326	9.123	25.006	33.893	42.389	294.197	0.000	0
20	8.013	32.387	8.011	25.221	34.157	42.699	274.066	0.057	19
40	6.676	32.482	6.673	25.479	34.476	43.076	249.730	0.109	39
60	5.892	32.625	5.887	25.690	34.723	43.356	229.819	0.157	59
80	5.526	32.786	5.520	25.861	34.910	43.557	213.751	0.202	79
100	5.405	32.978	5.397	26.027	35.079	43.729	198.179	0.243	99
150	5.425	33.622	5.413	26.535	35.576	44.216	150.649	0.330	148
200	4.779	33.812	4.764	26.760	35.831	44.498	129.666	0.400	198
250	4.162	33.849	4.144	26.856	35.957	44.654	120.758	0.463	247
300	4.095	33.909	4.074	26.911	36.015	44.714	115.980	0.522	297
350	3.976	33.958	3.952	26.962	36.072	44.776	111.478	0.579	347
400	3.922	33.999	3.894	27.001	36.113	44.819	108.247	0.634	396
450	3.875	34.049	3.844	27.046	36.160	44.868	104.412	0.687	446
500	3.822	34.087	3.787	27.082	36.198	44.908	101.407	0.738	495
600	3.680	34.160	3.638	27.154	36.277	44.994	95.217	0.837	594
700	3.494	34.225	3.446	27.225	36.357	45.082	89.121	0.929	693
800	3.305	34.279	3.250	27.286	36.428	45.162	83.773	1.015	792
900	3.137	34.319	3.076	27.335	36.484	45.227	79.655	1.097	890
1000	2.954	34.356	2.887	27.381	36.541	45.292	75.555	1.174	989
1100	2.784	34.394	2.710	27.427	36.595	45.355	71.480	1.248	1088
1200	2.626	34.429	2.546	27.469	36.646	45.413	67.717	1.318	1186
1300	2.506	34.455	2.420	27.501	36.684	45.457	65.000	1.384	1285
1400	2.383	34.481	2.290	27.531	36.723	45.501	62.213	1.448	1383
1500	2.288	34.503	2.189	27.558	36.753	45.537	60.000	1.509	1482
1600	2.198	34.523	2.090	27.582	36.782	45.571	57.937	1.568	1580
1700	2.117	34.540	2.004	27.603	36.807	45.600	56.215	1.625	1679
1800	2.057	34.554	1.936	27.619	36.827	45.624	54.908	1.680	1777
1900	1.981	34.570	1.853	27.639	36.851	45.651	53.243	1.734	1875
2000	1.908	34.585	1.773	27.657	36.873	45.678	51.660	1.787	1974
2100	1.867	34.594	1.724	27.668	36.887	45.693	50.880	1.838	2072
2200	1.823	34.603	1.673	27.679	36.901	45.710	50.046	1.889	2170
2300	1.776	34.613	1.618	27.691	36.916	45.728	49.084	1.938	2268
2400	1.743	34.620	1.576	27.700	36.926	45.741	48.500	1.987	2366
2500	1.712	34.626	1.537	27.707	36.936	45.752	48.001	2.035	2464
2600	1.677	34.633	1.494	27.716	36.947	45.766	47.364	2.083	2562
2700	1.654	34.637	1.462	27.722	36.954	45.774	47.090	2.130	2660
2800	1.626	34.643	1.425	27.729	36.964	45.786	46.593	2.177	2758
2900	1.599	34.648	1.390	27.736	36.972	45.796	46.169	2.223	2856
3000	1.581	34.652	1.362	27.741	36.979	45.804	45.931	2.269	2954
3100	1.564	34.656	1.336	27.746	36.986	45.812	45.699	2.315	3051
3200	1.543	34.660	1.306	27.751	36.993	45.820	45.402	2.361	3149
3300	1.531	34.663	1.284	27.755	36.997	45.826	45.298	2.406	3247
3400	1.516	34.666	1.260	27.759	37.003	45.833	45.143	2.451	3344
3500	1.506	34.669	1.240	27.763	37.008	45.839	45.055	2.496	3442
3600	1.498	34.671	1.222	27.766	37.012	45.844	45.063	2.541	3540
3700	1.491	34.674	1.204	27.770	37.016	45.849	45.011	2.586	3637
3800	1.486	34.676	1.189	27.772	37.020	45.854	45.057	2.631	3735
3900	1.481	34.678	1.173	27.775	37.023	45.859	45.099	2.677	3832
4000	1.480	34.680	1.162	27.777	37.026	45.861	45.201	2.722	3929
4100	1.482	34.681	1.153	27.779	37.028	45.864	45.420	2.767	4027
4200	1.483	34.682	1.142	27.780	37.030	45.866	45.622	2.813	4124
4300	1.485	34.683	1.133	27.782	37.032	45.869	45.839	2.858	4221
4400	1.490	34.684	1.127	27.783	37.034	45.871	46.104	2.904	4318
4500	1.494	34.685	1.119	27.784	37.036	45.873	46.354	2.950	4416
4600	1.499	34.686	1.112	27.786	37.037	45.875	46.619	2.997	4513
4700	1.505	34.686	1.106	27.786	37.038	45.876	46.973	3.044	4610
4800	1.510	34.687	1.099	27.787	37.040	45.878	47.239	3.091	4707
4900	1.516	34.688	1.093	27.788	37.041	45.880	47.523	3.138	4804
5000	1.524	34.688	1.089	27.789	37.042	45.882	47.913	3.186	4901
5100	1.531	34.689	1.083	27.790	37.043	45.883	48.215	3.234	4998
5200	1.540	34.689	1.080	27.790	37.044	45.883	48.625	3.282	5094
5300	1.549	34.690	1.076	27.791	37.045	45.885	48.967	3.331	5191
5400	1.558	34.690	1.072	27.792	37.045	45.885	49.179	3.380	5288
5492	1.568	34.690	1.070	27.792	37.046	45.885	49.792	3.426	5377

WISKIN BOTTLE DATA		SALINITY	DIS O2 ML/L	O2 SAT %	SIO3 UM/L	PO4 UM/L	NO3 UM/L	NO2 UM/L	TRIT TUBIN	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
DEPTH M	TEMP DEG C													
1	9.800	32.322	7.73	119.8	2.3	0.55	1.0	0.10	3.800	24.895	33.752	42.220	1	
50	6.124	32.531	6.71	95.5	19.8	1.24	12.2	0.32	6.020	25.600	34.627	43.256	50	
99	5.584	32.935	5.16	75.6	31.4	1.72	21.3	0.02	5.576	25.972	35.016	43.658	99	
146	5.552	33.577	3.19	47.9	51.1	2.24	31.2	0.01	5.540	26.484	35.520	44.155	147	
191	4.945	33.798	2.53	35.4	63.9	2.53	16.1	0.01	4.930	26.730	35.752	44.452	192	
292	4.182	33.909	1.17	18.8	94.9	2.91	41.9	0.01	4.161	26.902	36.001	44.696	294	
392	3.931	34.009	0.75	10.2	99.8	3.06	44.2	0.01	3.903	27.008	36.119	44.925	395	
492	3.778	34.102	0.59	8.0	107.5	3.39	44.5	0.01	3.744	27.099	36.216	44.928	496	
589	3.631	34.178	0.46	6.2	119.5	3.11	44.7	0.00	3.590	27.173	36.298	45.017	594	
691	3.453	34.239	0.39	5.3	128.2	3.13	44.9	0.00	3.405	27.247	36.373	45.100	697	
789	3.279	34.286	0.37	5.0	135.7	3.14	45.0	0.00	3.225	27.294	36.437	45.172	796	
885	3.110	34.326	0.36	4.8	143.1	3.13	45.1	0.00	3.050	27.343	36.494	45.237	894	
985	2.942	34.361	0.39	5.2	149.8	3.15	45.1	0.00	2.875	27.386	36.546	45.298	995	
1231	2.572	34.443	0.49	6.5	160.6	3.13	45.0	0.00	2.489	27.485	36.665	45.434	1244	
1500	2.272	34.508	0.73	9.6	169.2	3.09	44.5	0.00	2.171	27.564	36.759	45.544	1517	
1725	2.086	34.550	1.05	13.7	174.0	3.02	43.8	0.00	1.967	27.614	36.820	45.615	1747	
1967	1.924	34.584	1.37	17.8	177.1	2.96	43.0	0.00	1.790	27.655	36.870	45.674	1992	
2465	1.719	34.628	2.01	26.0	177.3	2.84	43.4	0.00	1.544	27.708	36.937	45.752	2501	
2964	1.594	34.655	2.56	32.9	171.0	2.74	39.6	0.00	1.365	27.743	36.981	45.805	3010	
3444	1.475	34.671	2.99	38.3	169.6	2.64	38.5	0.00	1.239	27.765	37.009	45.840	3501	
3923	1.458	34.679	3.27	41.8	169.6	2.59	37.8	0.00	1.171	27.776	37.024	45.859	3993	
4418	1.494	34.683	3.46	44.2	164.8	2.54	37.0	0.00	1.120	27.784	37.035	45.873	4502	
4880	1.523	34.688	3.58	45.7	160.4	2.53	36.7	0.00	1.091	27.788	37.041	45.880	4978	
5375	1.568	34.691	3.66	46.7	157.3	2.51	36.4	0.00	1.071	27.792	37.046	45.886	5489	

# MARATHON 2 STA. 93

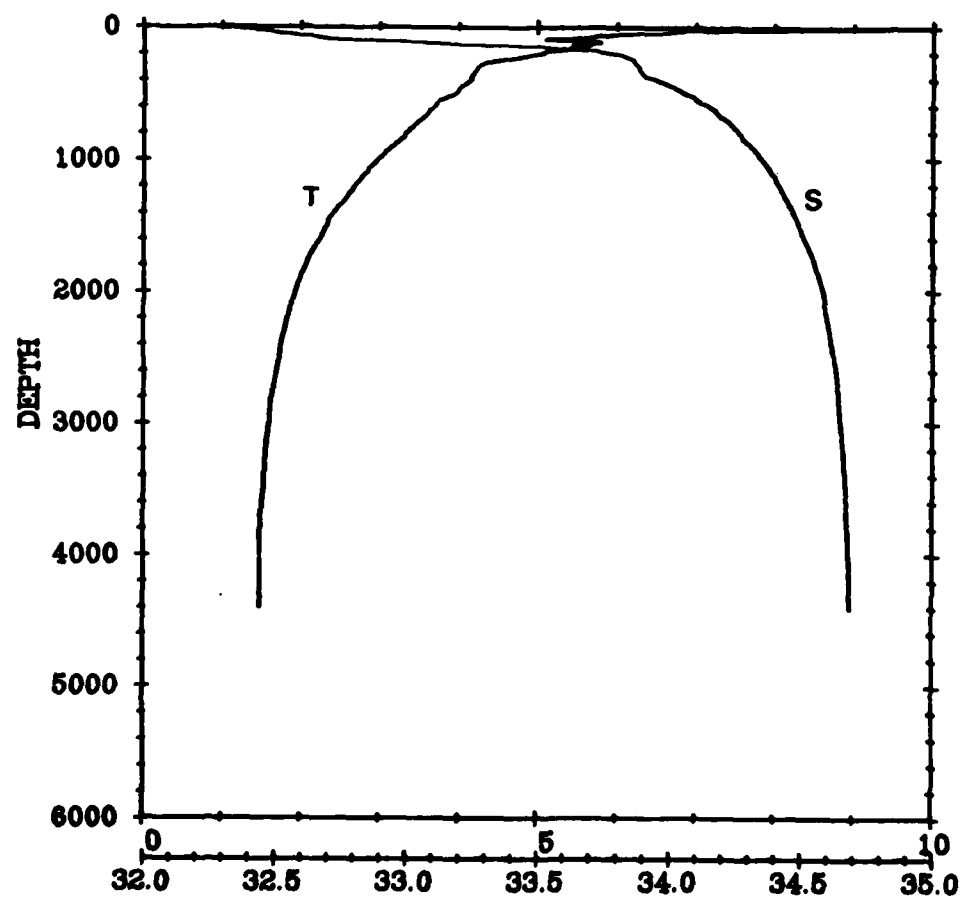
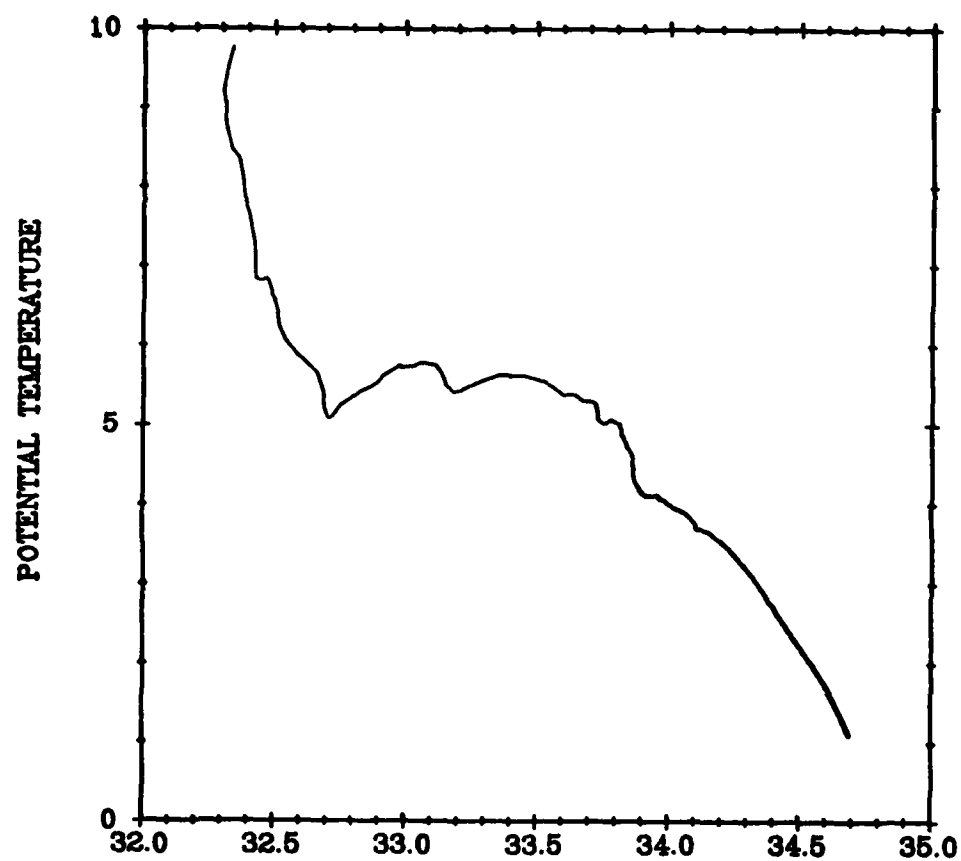


R/V THOMAS WASHINGTON MARATHON LEO II STATION 94  
 LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
 55 46.6N 152 53.0W 5/ 2/84 0806 4405 140 10 8 9 7 8 1019 0

CTD DATA PRESS DB	TEMP DEG C	SALINITY	POT TEMP DEG C	SIGMA 3	SIGMA 2	SIGMA 4	SVA CL/TON	DYNAMIC HT	DEPTH M
0	9.251	32.320	9.251	24.981	33.863	42.354	296.555	0.000	0
10	9.844	32.386	7.842	25.244	34.188	41.718	271.829	0.057	19
20	6.619	32.487	6.616	25.492	34.492	41.093	248.500	0.109	39
30	5.970	32.574	5.965	25.641	34.671	40.301	234.554	0.157	59
40	5.510	32.670	5.504	25.771	34.823	40.472	222.277	0.203	79
50	5.386	32.814	5.378	25.900	34.955	40.609	210.273	0.246	99
60	5.572	33.479	5.560	26.405	35.441	40.076	163.063	0.339	148
70	5.056	33.775	5.041	26.700	35.757	40.412	135.517	0.414	198
80	4.592	33.859	4.574	26.818	35.888	40.574	124.582	0.479	248
90	4.242	33.878	4.221	26.871	35.991	40.661	119.851	0.540	297
100	4.177	33.893	4.152	26.890	36.037	40.686	118.466	0.598	347
110	4.142	33.945	4.113	26.935	36.101	40.734	114.624	0.658	396
120	4.029	34.004	3.997	26.994	36.149	40.802	109.417	0.714	446
130	3.952	34.050	3.917	27.039	36.265	40.854	105.562	0.768	495
140	3.701	34.148	3.659	27.141	36.340	40.980	96.338	0.869	544
150	3.538	34.261	3.489	27.210	36.407	41.139	85.558	0.962	593
160	3.360	34.309	3.305	27.268	36.469	41.209	80.973	1.050	642
170	3.190	34.350	3.129	27.322	36.529	41.277	76.567	1.134	691
180	3.006	34.386	2.938	27.372	36.581	41.338	72.708	1.212	740
190	2.842	34.414	2.768	27.416	36.624	41.388	69.632	1.287	789
200	2.699	34.440	2.619	27.451	36.662	41.432	66.931	1.358	838
210	2.580	34.469	2.493	27.483	36.705	41.481	63.748	1.426	887
220	2.441	34.493	2.348	27.518	36.739	41.521	61.258	1.492	936
230	2.334	34.511	2.234	27.547	36.765	41.551	59.508	1.554	985
240	2.236	34.533	2.149	27.568	36.796	41.587	57.317	1.615	1034
250	2.159	34.552	2.045	27.594	36.823	41.618	55.279	1.673	1083
260	2.076	34.568	1.955	27.616	36.847	41.647	53.580	1.729	1132
270	1.997	34.581	1.869	27.636	36.867	41.670	52.279	1.784	1181
280	1.915	34.592	1.800	27.652	36.883	41.689	51.246	1.837	1230
290	1.835	34.600	1.742	27.665	36.895	41.703	50.552	1.888	1279
300	1.855	34.609	1.694	27.675	36.909	41.719	49.727	1.939	1328
310	1.847	34.618	1.645	27.686	36.922	41.735	48.888	1.989	1377
320	1.804	34.624	1.595	27.697	36.932	41.748	48.380	2.039	1426
330	1.762	34.631	1.555	27.704	36.932	41.761	47.746	2.087	1475
340	1.710	34.624	1.511	27.713	36.943	41.772	47.249	2.135	1524
350	1.635	34.631	1.474	27.721	36.953	41.783	46.773	2.183	1573
360	1.666	34.637	1.433	27.728	36.962	41.792	46.447	2.230	1622
370	1.634	34.643	1.404	27.734	36.975	41.799	46.325	2.277	1671
380	1.614	34.647	1.380	27.738	36.982	41.807	46.068	2.323	1720
390	1.599	34.650	1.352	27.743	36.990	41.817	45.574	2.369	1769
400	1.580	34.654	1.320	27.749	36.995	41.823	45.543	2.415	1818
410	1.537	34.659	1.296	27.754	36.999	41.830	45.434	2.461	1867
420	1.543	34.662	1.274	27.757	37.005	41.835	45.364	2.506	1916
430	1.531	34.665	1.255	27.761	37.010	41.842	45.244	2.551	1965
440	1.522	34.668	1.233	27.765	37.016	41.848	45.133	2.597	2014
450	1.510	34.671	1.212	27.769	37.019	41.852	45.165	2.642	2063
460	1.499	34.674	1.196	27.772	37.024	41.859	45.028	2.687	2112
470	1.493	34.676	1.173	27.776	37.025	41.861	45.217	2.732	2161
480	1.482	34.679	1.153	27.777	37.025	41.865	45.286	2.777	2210
490	1.481	34.680	1.149	27.780	37.032	41.868	45.487	2.823	2259
500	1.478	34.682	1.139	27.781	37.032	41.871	45.616	2.868	2308
510	1.479	34.683	1.128	27.784	37.035	41.873	45.935	2.914	2357
520	1.480	34.685	1.121	27.784	37.039	41.877	45.922	2.959	2406
530	1.484	34.687	1.106	27.787	37.039	41.877	45.922	2.998	2455

3000	1.480	34.685	1.121	27.787	17.239	45.577								
4000	1.488	34.685	1.106											
4494	1.479	34.687												
MISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIGMA 1	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS DB
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	CEP C				
1	9.423	32.296	7.75	119.2	1.6	0.47	0.7	0.02	9.423	24.935	33.809	42.293	1	
21	8.401	32.342	6.84	114.3	1.4	0.73	2.5	0.08	8.199	25.129	34.048	42.574	21	
34	6.210	32.512	6.32	97.8	20.0	1.19	11.3	0.27	6.225	25.559	34.578	43.197	54	
54	5.413	32.799	3.79	88.7	29.7	1.56	18.4	0.31	5.405	25.885	34.938	43.591	103	
100	5.619	33.425	1.79	88.7	48.2	2.14	29.3	0.12	5.626	26.154	35.397	44.320	158	
157	5.095	33.778	2.52	77.4	2.8	2.55	36.4	0.00	5.079	26.698	35.752	44.426	204	
203	5.095	33.778	1.85	25.6	77.4	2.81	40.4	0.00	5.079	26.698	35.752	44.426	254	
252	4.465	33.857	1.54	22.6	81.9	2.85	41.5	0.00	4.447	26.833	35.958	44.598	300	
298	4.283	33.873	1.19	16.3	91.7	2.97	43.4	0.00	4.262	26.933	36.035	44.732	403	
340	4.129	33.940	0.81	11.1	101.8	3.10	44.7	0.00	4.170	27.022	36.132	44.835	503	
399	3.974	34.032	0.56	7.5	117.8	3.13	45.2	0.00	3.939	27.138	36.260	44.976	603	
449	3.720	34.142	0.44	5.0	125.9	3.14	45.6	0.00	3.515	27.204	36.332	45.074	701	
518	3.564	34.207	0.40	5.4	134.3	3.18	45.7	0.00	3.319	27.266	36.471	45.193	799	
605	3.564	34.207	0.40	5.4	134.3	3.18	45.7	0.00	3.319	27.266	36.471	45.193	898	
732	3.174	34.261	0.39	5.2	142.2	3.19	45.7	0.00	2.754	27.369	36.524	45.422	1011	
899	3.127	34.299	0.37	4.9	147.9	3.19	45.7	0.00	2.519	27.476	36.603	45.523	1257	
1071	3.123	34.345	0.35	4.9	153.0	3.16	45.7	0.00	2.233	27.548	36.741	45.607	1514	
1244	2.503	34.434	0.29	9.1	157.6	3.12	45.3	0.00	1.991	27.559	36.871	45.675	1758	
1497	2.314	34.435	0.28	12.9	160.5	2.88	41.8	0.00	1.787	27.556	36.939	45.755	2039	
1717	2.109	34.646	1.38	17.9	179.4	2.77	40.3	0.00	1.531	27.710	36.980	45.824	2355	
2013	1.925	34.555	2.34	26.3	180.6	2.77	40.3	0.00	1.367	27.742	37.025	45.835	3094	
2515	1.713	34.629	2.55	32.8	179.4	2.79	39.2	0.00	1.254	27.761	37.026	45.861	3989	
3079	1.591	34.554	4.95	37.8	170.5	2.63	38.0	0.00	1.163	27.777	37.038	45.876	4477	
3437	1.520	34.668	3.27	41.8	165.7	2.57	37.4	0.00	1.108	27.787				
3920	1.480	34.687	3.48	44.5										
4134	1.479	34.687												

# MARATHON 2 STA. 94



LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
55 56.38	152 57.6W	6/ 2/84	1336	2665	140	8	8.3	7.2	1015.9

## CTD DATA

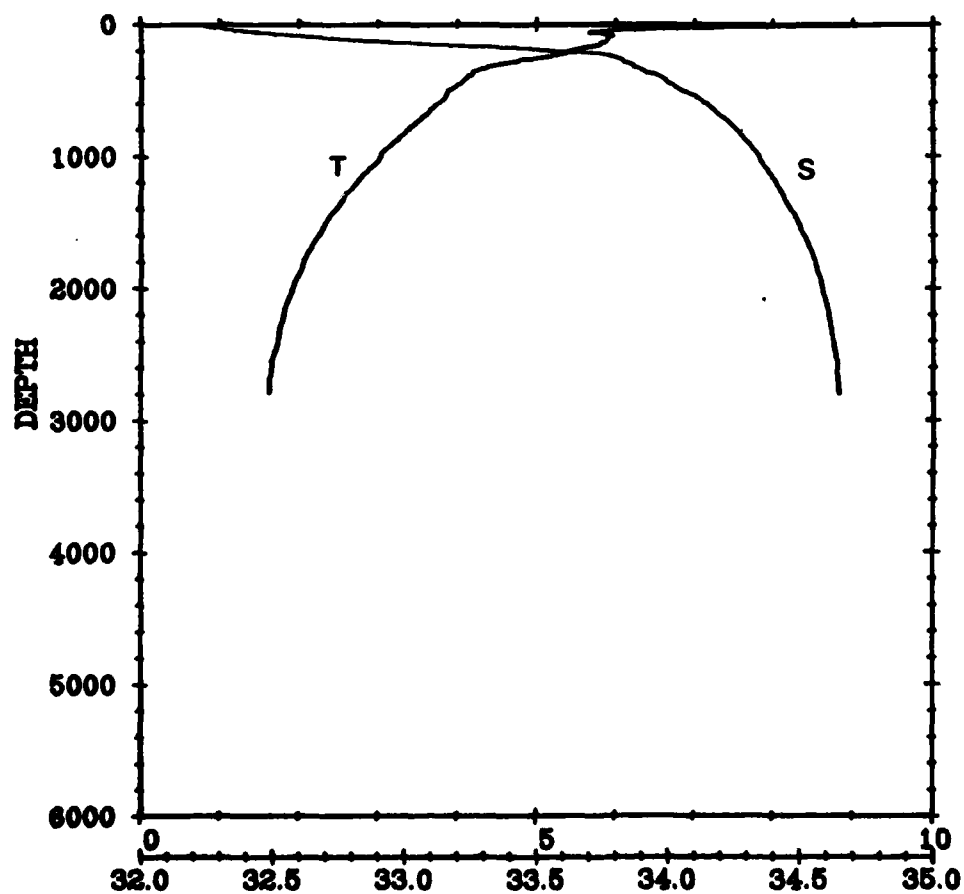
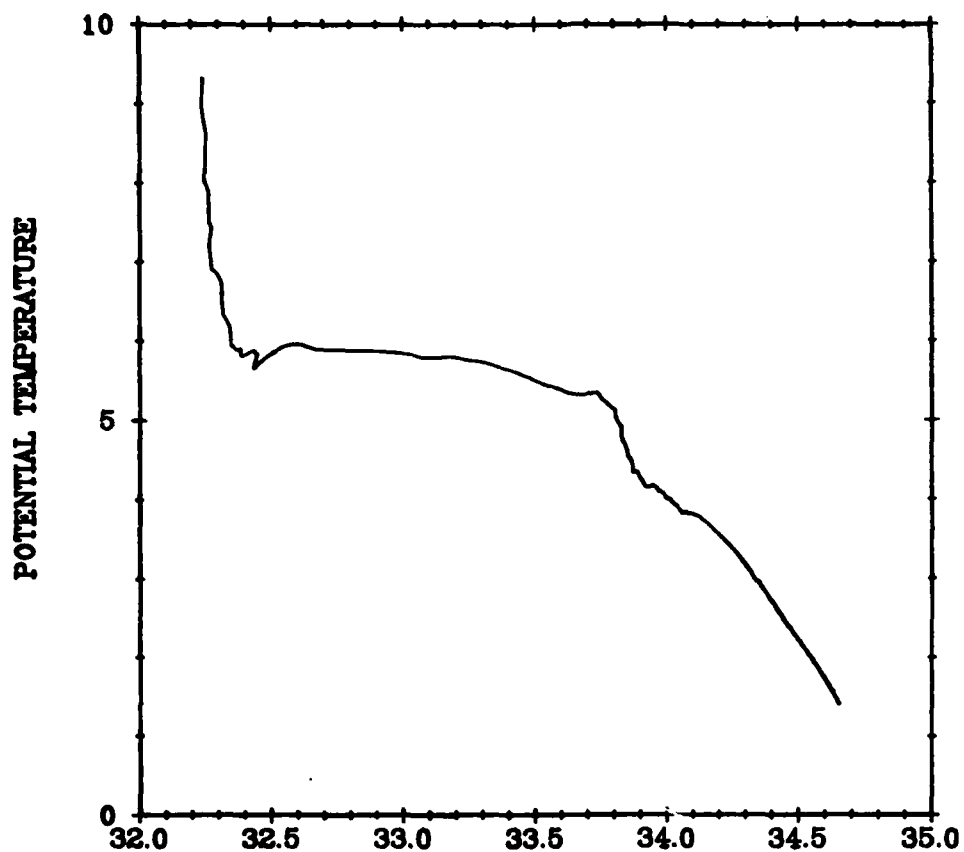
PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CL/TOW		M
0	9.205	32.241	9.205	24.927	33.811	42.305	301.746	0.000	0
20	7.763	32.263	7.761	25.159	34.109	42.663	279.919	0.058	19
40	6.277	32.336	6.274	25.414	34.433	43.053	255.813	0.112	39
60	5.800	32.428	5.795	25.546	34.586	43.226	243.537	0.162	59
80	5.901	32.538	5.895	25.620	34.655	43.288	236.660	0.210	79
100	5.916	32.667	5.908	25.721	34.752	43.384	227.376	0.256	99
150	5.816	33.088	5.804	26.066	35.096	43.726	195.201	0.362	148
200	5.458	33.547	5.442	26.472	35.513	44.153	157.192	0.450	198
250	5.125	33.798	5.106	26.710	35.764	44.416	135.099	0.523	248
300	4.587	33.853	4.565	26.814	35.894	44.571	125.446	0.588	297
350	4.266	33.902	4.241	26.888	35.984	44.675	118.743	0.649	347
400	4.137	33.970	4.108	26.956	36.057	44.754	112.699	0.707	396
450	4.041	34.001	4.009	26.991	36.097	44.798	109.770	0.763	446
500	3.904	34.047	3.869	27.042	36.154	44.861	105.271	0.816	495
600	3.777	34.138	3.735	27.127	36.245	44.958	97.903	0.918	594
700	3.594	34.200	3.545	27.195	36.322	45.043	92.064	1.013	693
800	3.398	34.257	3.343	27.260	36.397	45.127	86.418	1.102	792
900	3.212	34.301	3.150	27.313	36.460	45.198	81.808	1.186	890
1000	3.032	34.344	2.964	27.365	36.520	45.267	77.296	1.266	989
1100	2.902	34.373	2.828	27.400	36.562	45.316	74.331	1.342	1088
1200	2.739	34.407	2.658	27.442	36.613	45.375	70.593	1.414	1186
1300	2.591	34.437	2.504	27.479	36.658	45.427	67.276	1.483	1285
1400	2.487	34.462	2.393	27.509	36.693	45.467	64.783	1.549	1384
1500	2.352	34.492	2.252	27.544	36.736	45.517	61.536	1.612	1482
1600	2.266	34.511	2.159	27.567	36.764	45.549	59.623	1.673	1580
1700	2.159	34.534	2.045	27.595	36.797	45.588	57.143	1.731	1679
1800	2.066	34.554	1.945	27.619	36.826	45.622	55.014	1.787	1777
1900	2.005	34.567	1.877	27.634	36.845	45.645	53.748	1.842	1876
2000	1.929	34.583	1.794	27.654	36.869	45.672	52.059	1.895	1974
2100	1.870	34.595	1.727	27.668	36.887	45.694	50.843	1.946	2072
2200	1.808	34.608	1.658	27.684	36.906	45.716	49.496	1.996	2170
2300	1.768	34.615	1.610	27.693	36.918	45.730	48.838	2.045	2268
2400	1.731	34.623	1.565	27.703	36.930	45.745	48.129	2.094	2366
2500	1.695	34.630	1.520	27.712	36.941	45.758	47.491	2.142	2464
2600	1.647	34.639	1.464	27.723	36.956	45.775	46.536	2.189	2562
2700	1.636	34.642	1.444	27.727	36.961	45.781	46.489	2.235	2660
2800	1.620	34.646	1.420	27.732	36.967	45.789	46.295	2.282	2758
2834	1.619	34.647	1.415	27.733	36.968	45.790	46.314	2.297	2791

## NISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUSIN	DEG C				DB
1	9.054	32.252	7.55	115.0	1.7	0.36	0.0	0.00	4.72	9.054	24.959	33.850	42.350	1
21	8.390	32.249	7.81	117.1	1.2	0.35	0.0	0.00		8.348	25.063	33.986	42.516	21
50	6.060	32.390	6.51	92.6	20.1	1.26	11.8	2.18	4.69	6.356	25.484	34.512	43.141	50
100	5.910	32.652	6.00	85.2	27.4	1.45	17.0	0.03	4.36	5.902	25.709	34.741	43.373	100
148	5.530	33.028	4.81	68.3	38.7	1.81	23.3	0.02	4.20	5.818	26.017	35.247	43.677	149
197	5.491	33.575	3.31	46.8	53.9	2.24	31.8	0.01	3.80	5.475	26.490	35.529	44.167	198
246	5.036	33.795	2.58	36.1	65.5	2.49	36.4	0.00	3.65	5.317	26.718	35.776	44.432	247
297	4.589	33.848	2.04	28.3	74.4	2.68	38.9	0.00	3.09	4.567	26.810	35.890	44.566	299
399	4.157	33.970	1.12	15.4	93.4	2.94	42.9	0.00	1.91	4.128	26.954	36.054	44.750	402
497	3.943	34.057	0.73	10.0	106.0	3.04	44.3	0.00	1.08	3.908	27.045	36.156	44.861	501
593	3.808	34.127	0.56	7.6	114.1	3.04	44.8	0.00	0.71	3.766	27.115	36.232	44.943	598
699	3.594	34.197	0.44	6.0	124.8	3.08	45.2	0.00	0.36	3.545	27.193	36.320	45.041	705
795	3.417	34.255	0.38	5.1	133.4	3.12	45.3	0.00	0.24	3.361	27.257	36.392	45.121	802
888	3.225	34.301	0.38	5.1	141.3	3.14	45.4	0.00	0.24	3.164	27.312	36.457	45.196	897
1061	2.935	34.365	0.40	5.3	152.7	3.13	45.4	0.00	0.01	2.862	27.391	36.551	45.303	1072
1248	2.657	34.424	0.48	6.4	162.3	3.13	45.4	0.00		2.572	27.463	36.638	45.404	1261
1503	2.349	34.492	0.69	9.1	172.7	3.08	44.8	0.00		2.247	27.545	36.736	45.518	1500
1740	2.108	34.546	1.02	13.3	178.2	3.02	44.1	0.00		1.990	27.609	36.813	45.607	1761
2020	1.914	34.587	1.42	18.4	193.3	2.97	43.1	0.00		1.775	27.658	36.874	45.678	2046
2307	1.748	34.621	1.86	24.0	185.9	2.87	41.7	0.00		1.587	27.699	36.926	45.739	2339
2567	1.648	34.642	2.21	28.5	186.1	2.81	40.9	0.00		1.465	27.725	36.958	45.777	2604
2680	1.630	34.643	2.30	29.6	185.5	2.79	40.6	0.00		1.437	27.728	36.962	45.783	2719
2790	1.619	34.647	2.36	30.4	194.8	2.77	40.4	0.00		1.416	27.733	36.968	45.790	2832



# MARATHON 2 STA. 95



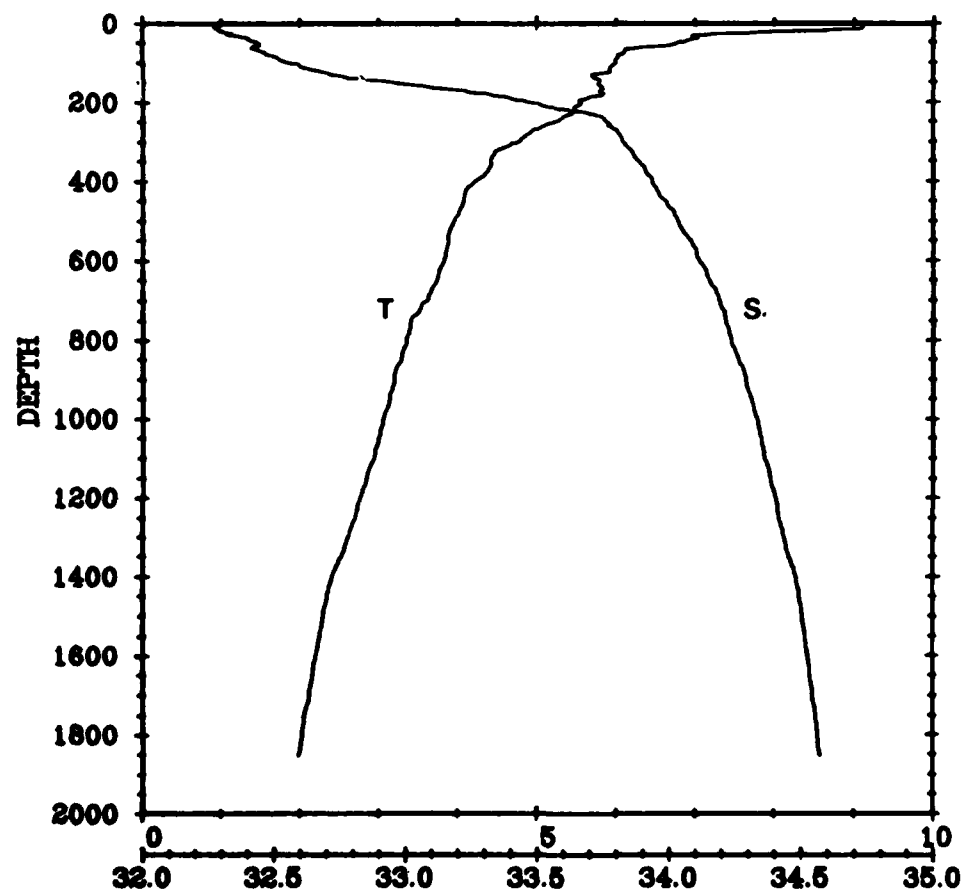
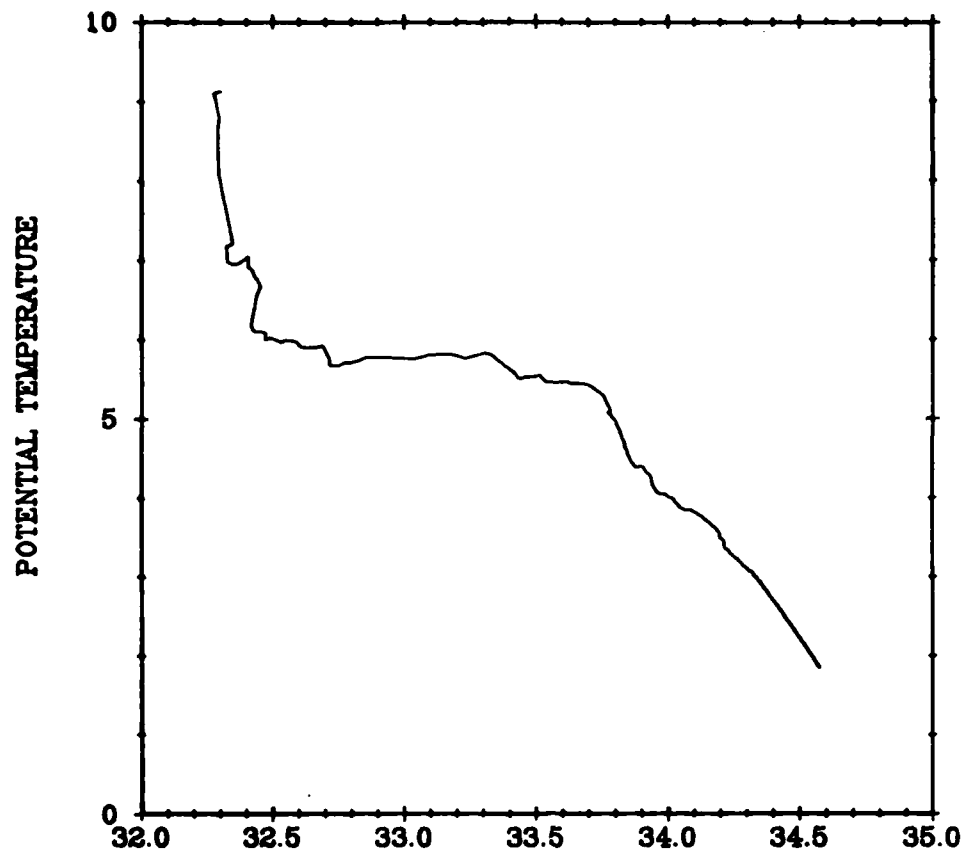
ROY THOMAS WASHINGTON MARATHON LEG 11 STATION 96

LATITUDE LONGITUDE MO/DY/YR START TIME BOTTOM WIND SPEED AIR TEMP WET BULB BAROM  
56 4 0N 151 2 0W 6/2/94 1824 1931 10 16 24.4 24.3 1011.5

STD DATA	PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SIGMA 6	DYNAMIC HT	DEPTH
DB	DEG C		DEG C					CM TON		M
0	9.386	32.281	9.386	24.977	33.866	42.164	49.939	0.100		0
20	8.138	32.305	8.136	25.138	34.070	42.508	49.913	0.078		19
40	6.941	32.397	6.937	25.377	34.363	42.952	49.815	0.112		39
60	6.421	32.415	6.416	25.475	34.485	43.097	49.732	0.143		59
80	6.050	32.480	6.043	25.557	34.584	43.212	49.656	0.172		79
100	5.780	32.556	5.972	25.625	34.655	43.285	49.548	0.207		99
120	5.775	32.929	5.763	25.945	34.990	43.614	49.626	0.171		148
140	5.562	33.457	5.546	26.399	35.426	44.162	49.143	0.464		198
160	5.240	33.761	5.220	26.668	35.716	44.363	49.190	0.540		248
180	4.770	33.826	4.747	26.773	35.844	44.512	49.494	0.607		297
200	4.421	33.882	4.395	26.856	35.944	44.628	49.319	0.670		347
220	4.254	33.936	4.225	26.917	36.013	44.704	49.515	0.710		396
240	4.077	33.982	4.045	26.972	36.076	44.776	49.579	0.737		446
260	3.965	34.032	3.930	27.023	36.133	44.838	49.707	0.941		495
280	3.835	34.114	3.793	27.102	36.218	44.928	49.823	0.945		594
300	3.621	34.189	3.572	27.184	36.310	45.129	49.716	1.142		693
320	3.357	34.235	3.302	27.247	36.386	45.118	49.710	1.132		792
340	3.189	34.290	3.128	27.307	36.454	45.194	49.375	1.217		890
360	3.067	34.330	2.999	27.350	36.504	45.250	49.719	1.298		989
380	2.945	34.362	2.870	27.388	36.548	45.299	49.622	1.375		1088
400	2.777	34.399	2.696	27.432	36.601	45.361	49.677	1.449		1186
420	2.629	34.433	2.542	27.473	36.650	45.417	49.956	1.519		1285
440	2.431	34.475	2.339	27.524	36.711	45.489	49.193	1.584		1383
460	2.299	34.503	2.199	27.558	36.752	45.535	49.124	1.646		1482
480	2.216	34.522	2.109	27.590	36.779	45.567	49.240	1.705		1580
500	2.125	34.541	2.012	27.603	36.807	45.500	49.274	1.752		1679
520	2.035	34.560	1.916	27.626	36.835	45.632	49.222	1.817		1777
540	1.975	34.573	1.849	27.641	36.854	45.654	49.856	1.858		1876

NISKIN BOTTLE DATA														
DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SI03	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
2	9.164	32.276	7.57	115.5	1.0	0.46	0.1	0.00		9.164	24.960	33.846	42.341	2
47	6.628	32.360D	7.23	104.2	11.8	0.97	5.1	0.13		6.624	25.389	34.390	42.993	47
99	5.977	32.528	6.58	92.3	21.4	1.30	13.2	0.21		5.999	25.595	34.530	43.264	99
147	5.797	32.774	5.59	79.2	31.1	1.61	19.5	0.04		5.785	25.820	34.856	43.491	147
195	5.820	33.370	3.79	53.9	47.0	2.10	28.6	0.01		5.804	26.289	35.314	43.940	195
248	5.126	33.735	2.79	39.3	60.0	2.41	34.2	0.00		5.106	26.637	35.681	44.325	248
293	4.788	33.823	2.27	31.5	69.5	2.62	37.5	0.00		4.766	26.769	35.839	44.556	295
390	4.293	33.924	1.39	19.1	87.3	2.89	41.6	0.00		4.265	26.903	35.997	44.687	393
505	3.945	34.043	0.78	10.5	105.1	3.04	43.9	0.00		3.909	27.034	36.145	44.850	509
591	3.936	34.112	0.55	5	113.5	3.07	44.4	0.00		3.794	27.101	36.216	44.926	596
721	3.604	34.182	0.44	6.0	124.9	3.11	44.9	0.00		3.555	27.180	36.307	45.027	707
791	3.367	34.240	0.42	5.7	135.3	3.12	45.1	0.00		3.312	27.250	36.388	45.119	799
911	3.183	34.291	0.41	5.5	143.4	3.13	45.2	0.00		3.120	27.308	36.456	45.196	920
1022	3.033	34.342	0.38	5.1	150.1	3.13	45.1	0.00		2.963	27.363	36.519	45.266	1032
1248	2.709	34.415	0.47	6.2	162.6	3.14	45.2	0.00		2.624	27.451	36.624	45.387	1261
1484	2.291	34.504	0.78	10.2	175.9	3.17	44.6	0.00		2.191	27.559	36.753	45.537	1501
1724	2.090	34.549	1.03	13.4	179.9	3.03	43.9	0.00		1.974	27.612	36.818	45.613	1745
1951	1.974	34.572	1.26	16.4	192.1	2.97	43.2	0.00		1.849	27.641	36.853	45.653	1974

# MARATHON 2 STA. 96



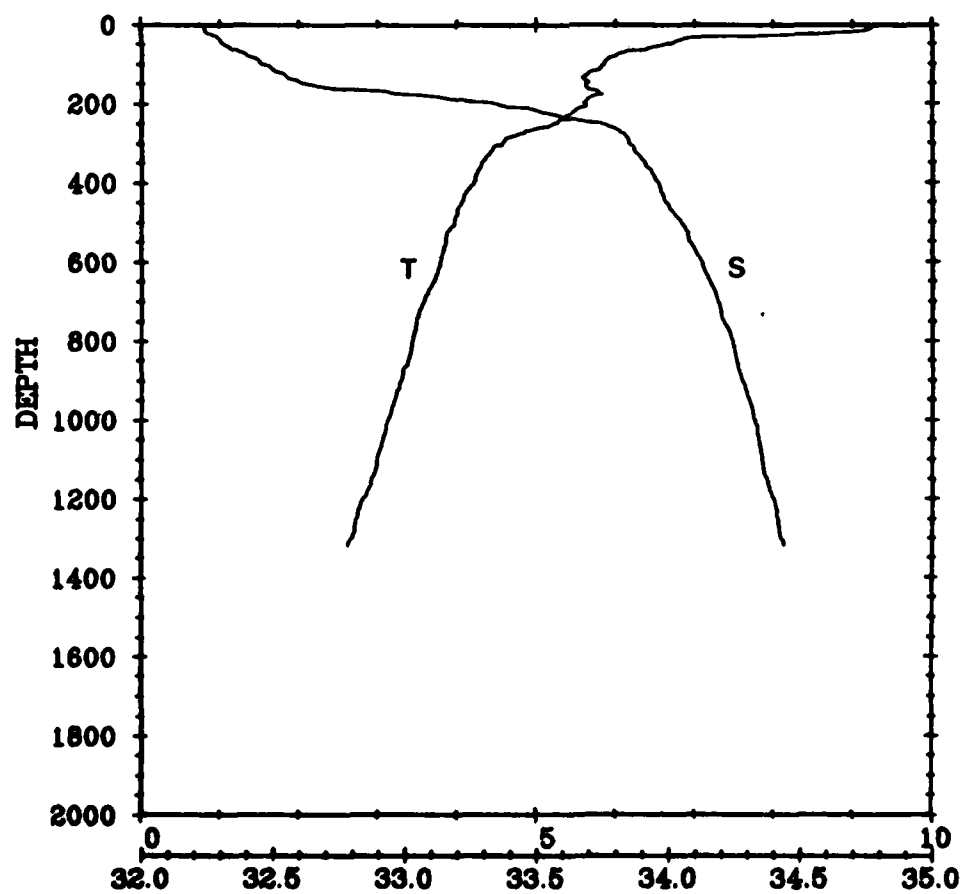
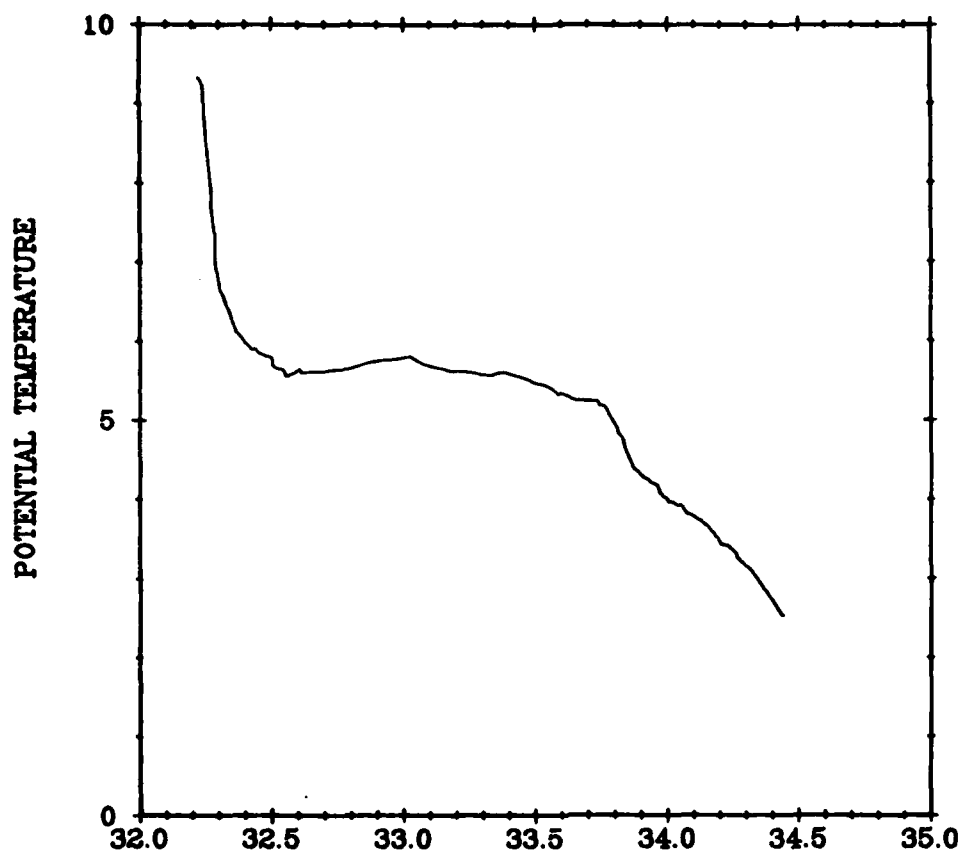
R/V THOMAS WASHINGTON MARATHON LEG II STATION 97

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	HB
56 12.0N	153 7.7W	6/2/84	2242	1340	100	16	11.7	9.4	1012.2

CTD DATA	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
PRESS DB	TEMP DEG C	SALINITY	POT TEMP DEG C	SIGMA 0	SIGMA 2	SIGMA 4	CL/TON
0	9.217	32.239	9.237	24.920	33.903	42.296	102.373
20	8.543	32.255	8.541	25.040	33.954	42.475	291.347
40	6.957	32.297	6.954	25.310	34.101	42.995	265.839
60	6.372	32.340	6.367	25.406	34.420	43.035	256.876
80	5.969	32.409	5.962	25.310	34.543	43.176	247.115
100	5.840	32.461	5.832	25.367	34.626	43.243	241.931
150	5.624	32.525	5.612	25.723	34.770	43.415	227.644
200	5.611	33.107	5.595	26.264	35.102	43.938	176.942
250	5.216	33.709	5.216	26.526	35.676	44.324	143.108
300	4.569	33.951	4.547	26.915	35.896	44.573	125.399
350	4.312	33.925	4.287	26.935	35.979	44.568	119.015
400	4.205	33.954	4.176	26.936	36.134	44.719	114.629
450	4.057	33.997	4.025	26.978	36.183	44.794	110.989
500	3.961	34.042	3.926	27.032	36.142	44.946	106.257
600	3.781	34.119	3.739	27.112	36.230	44.942	99.164
700	3.581	34.183	3.532	27.183	36.311	45.033	93.140
800	3.438	34.239	3.383	27.242	36.377	45.115	89.133
900	3.293	34.274	3.231	27.284	36.427	45.162	84.701
1000	3.138	34.323	3.069	27.338	36.489	45.211	80.020
1100	2.990	34.355	2.919	27.379	36.536	45.255	76.674
1200	2.838	34.390	2.756	27.420	36.586	45.343	72.954
1300	2.681	34.422	2.593	27.460	36.634	45.399	69.393
1332	2.608	34.438	2.518	27.479	36.657	45.425	67.563

WISKIN BOTTLE DATA	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
DEPTH M	TEMP DEG C	SALINITY	SIGMA 0	SIGMA 2	SIGMA 4
1	9.260	32.260	9.260	24.925	33.907
9	9.256	32.247	9.255	24.923	33.904
47	6.793	32.301	6.789	25.321	34.115
146	5.479	32.629	5.468	25.727	34.781
196	5.637	33.217	5.601	26.183	35.217
296	4.640	33.944	4.618	26.801	35.979
393	4.212	33.958	4.184	26.938	36.036
493	3.955	34.037	3.930	27.027	36.137
588	3.803	34.108	3.761	27.101	36.218
689	3.625	34.180	3.576	27.176	36.302
788	3.416	34.237	3.361	27.242	36.379
891	3.276	34.279	3.214	27.290	36.433
975	3.142	34.321	3.074	27.336	36.486
1213	2.771	34.402	2.688	27.436	36.604
1315	2.605	34.438	2.516	27.479	36.657

# MARATHON 2 STA. 97



R/V THOMAS WASHINGTON MARATHON LEG II STATION 98

LATITUDE	LONGITUDE	MO/DY/YR	START TIME	BOTTOM	WIND	SPEED	AIR TEMP	WET BULB	BAROM
			GMT	M	DIR	KT	DEG C	DEG C	MB
56 13 0N	153 12 4W	6/ 3/84	210	103	100	16	9 4	8 9	1010 5

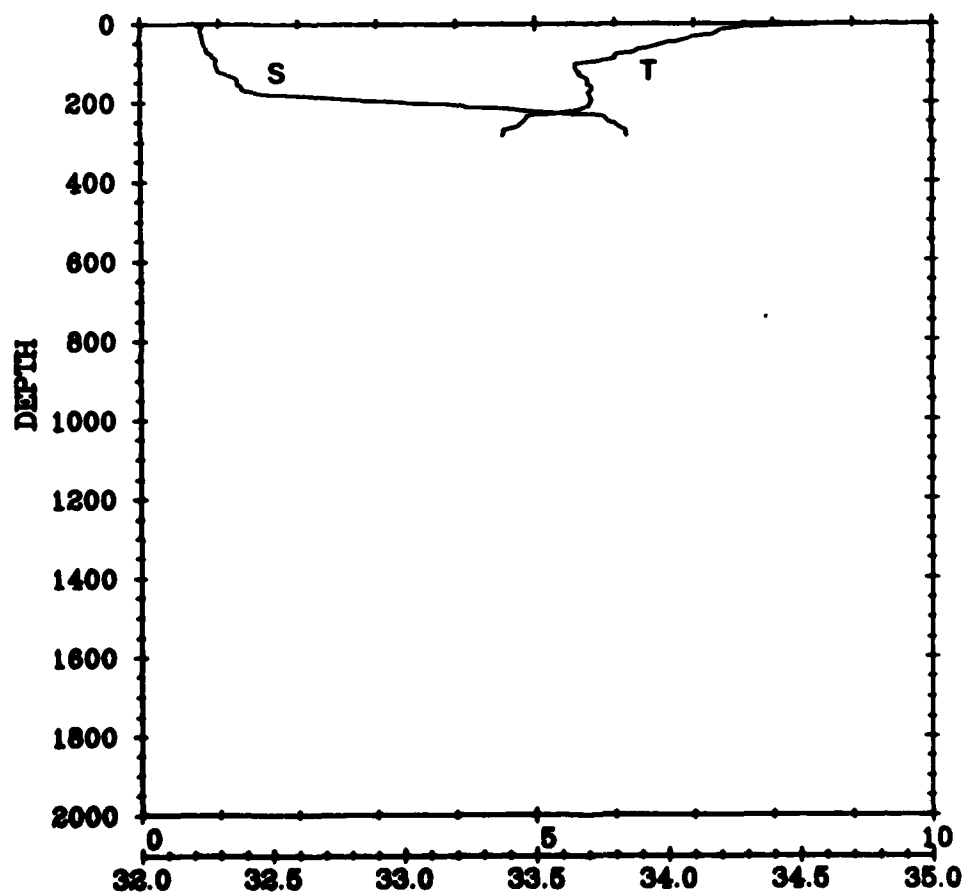
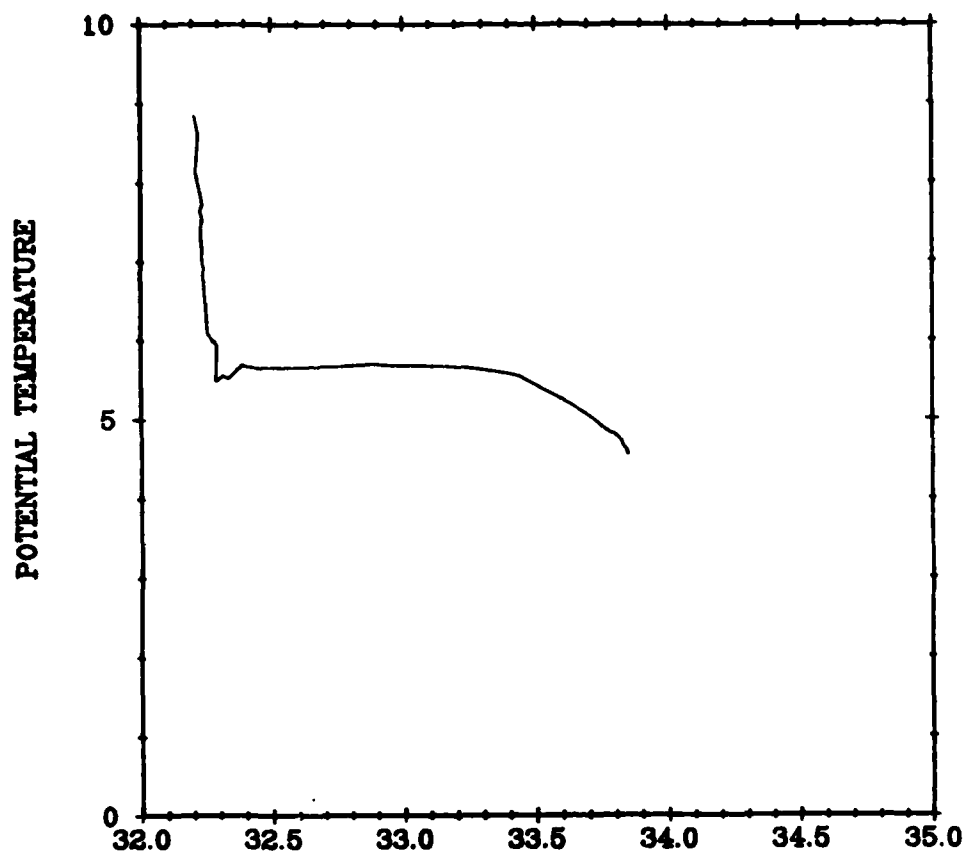
CTD DATA

PRESS	TEMP	SALINITY	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	SVA	DYNAMIC HT	DEPTH
DB	DEG C		DEG C				CL/TON		M
0	8 295	32 220	8 295	25 349	33 974	42 526	290 149	0 000	0
20	7 352	32 231	7 350	25 191	34 160	42 713	276 861	0 057	19
40	6 884	32 240	6 881	25 261	34 252	42 846	270 445	0 111	39
60	6 443	32 249	6 438	25 125	34 317	42 951	264 554	0 165	59
80	6 068	32 270	6 061	25 189	34 479	43 049	258 712	0 217	79
100	5 681	32 289	5 673	25 450	34 479	43 147	253 003	0 268	99
120	5 563	32 372	5 551	25 518	34 567	43 214	247 056	0 393	148
140	5 701	32 964	5 695	25 982	35 020	43 657	203 667	0 506	198
160	4 854	33 735	4 835	26 731	35 798	44 463	133 010	0 590	248
186	4 589	33 846	4 568	26 809	35 888	44 565	125 861	0 637	283

WISKIN BOTTLE DATA

DEPTH	TEMP	SALINITY	DIS O2	O2 SAT	SIO3	PO4	NO3	NO2	TRIT	POT TEMP	SIGMA 0	SIGMA 2	SIGMA 4	PRESS
M	DEG C		ML/L	%	UM/L	UM/L	UM/L	UM/L	TUBIN	DEG C				DB
1	9 334	32 243	7 68	117 7	1 4	0 43	0 1	0 01		9 334	24 908	33 787	42 275	1
17	7 465	32 237	7 85	115 3	6 9	0 45	2 1	0 07		7 463	25 180	34 144	42 712	17
45	6 779	32 245	7 45	107 7	11 8	0 49	4 5	0 12		6 775	25 279	34 275	42 873	45
87	5 649	32 278	6 84	96 3	22 4	1 26	10 0	0 22		5 642	25 445	34 496	43 144	87
140	5 681	32 382	6 58	92 7	21 9	1 35	12 7	0 22		5 670	25 524	34 571	43 218	141
223	5 674	33 237	4 17	59 1	44 4	2 24	26 8	0 03		5 657	26 231	35 236	43 870	224
254	4 813	33 808	2 31	32 2	59 6	2 43	37 0	0 02		4 794	26 753	35 822	44 489	255
281	4 594	33 949	2 03	28 1	5 4	2 72	38 5	0 02		4 573	26 810	35 890	44 566	283

# MARATHON 2 STA. 98



END

DATE

FILMED

4-88

DTIC